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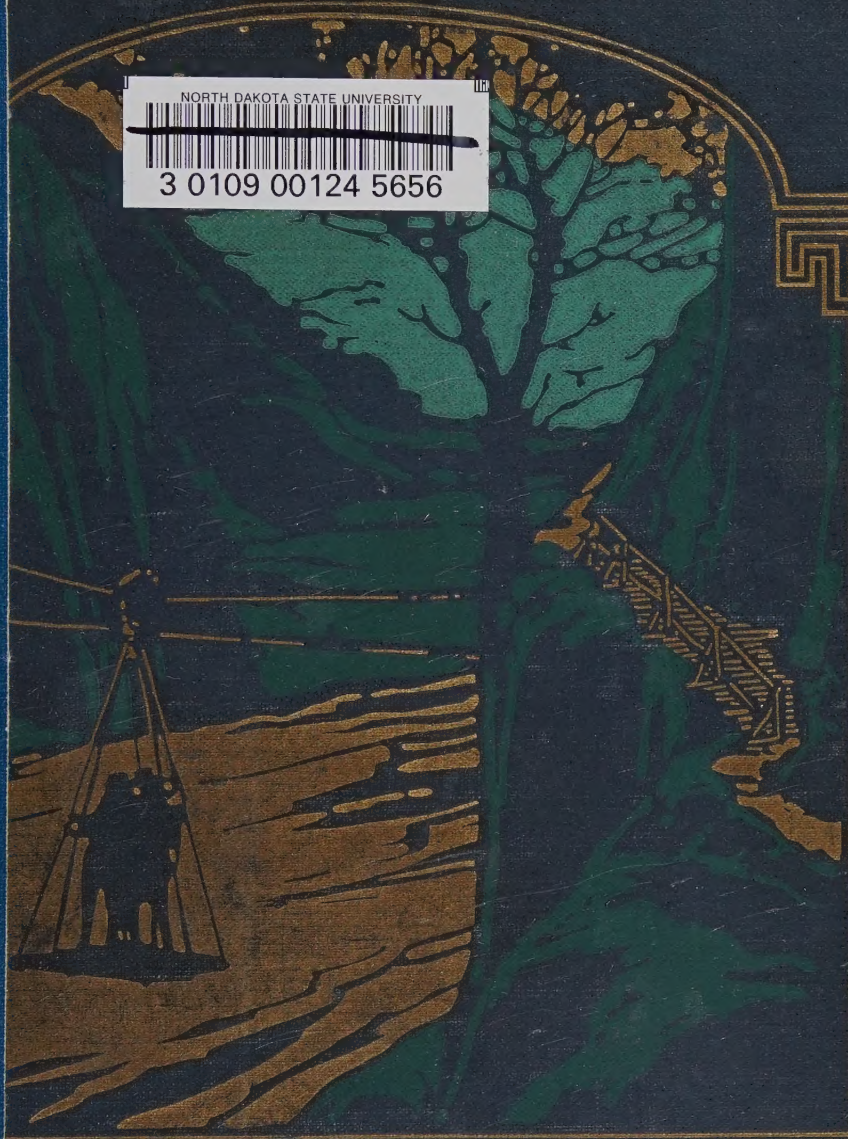
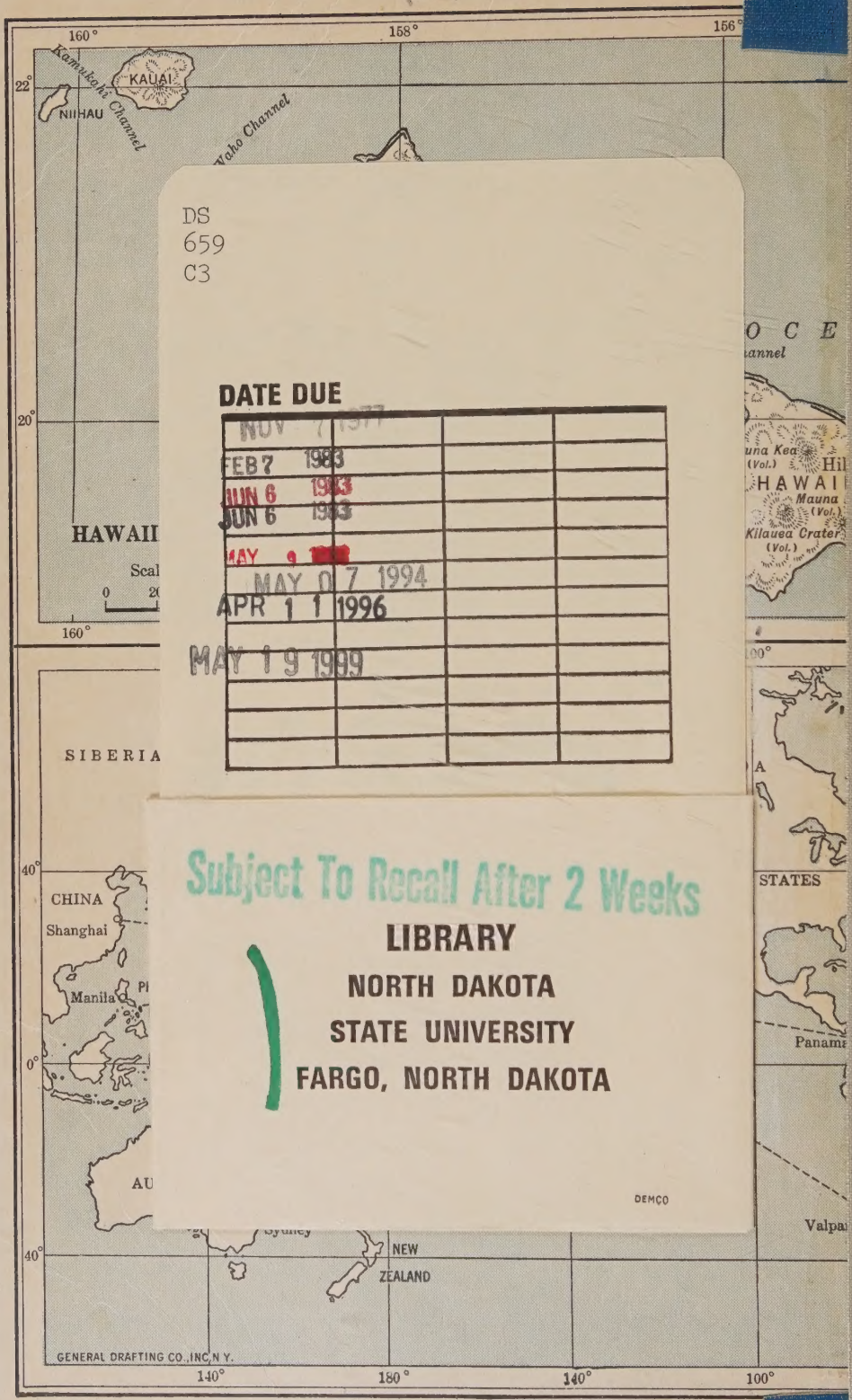


THROUGH THE PHILIPPINES

FRANK G. CARPENTER



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BASILAN I.
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JOLO I.
ORNEO
CELEBES SEA

WITHDRAWN

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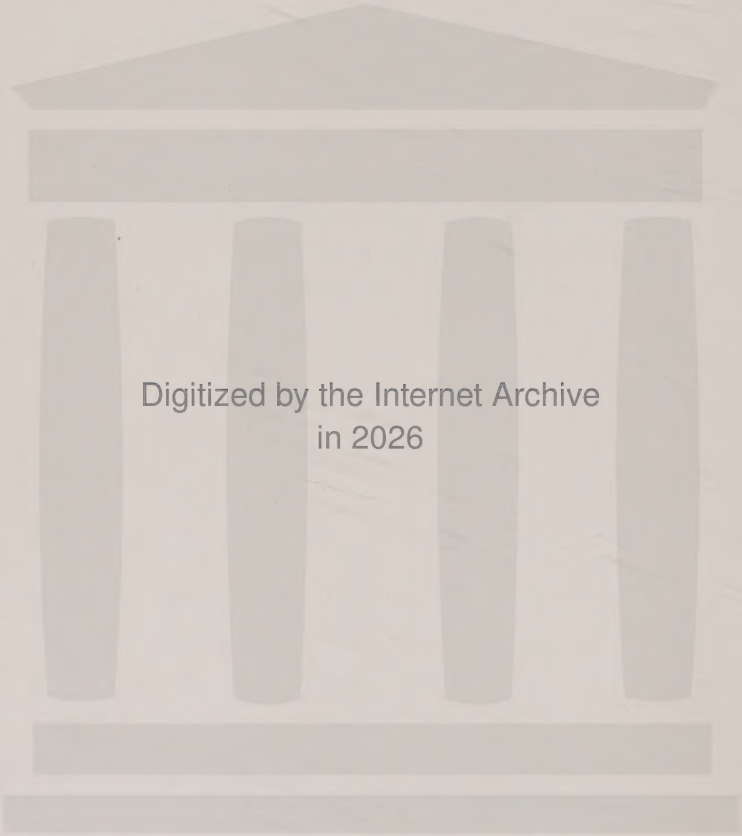
—

Familiar Talks About Countries and Peoples

WITH THE AUTHOR ON THE SPOT AND THE READER IN HIS HOME, BASED ON A HALF MILLION MILES OF TRAVEL OVER THE GLOBE

"Reading Carpenter is Seeing the World"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WITHDRAWN

THROUGH THE PHILIPPINES

IN THE PHILIPPINES

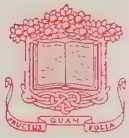
Zamboanga, the capital of Moroland, is one of the most beautiful little cities of the tropics. It is in the midst of a coconut forest and many of its houses are hidden in flowers.

CARPENTER'S WORLD TRAVELS

Through the Philippines and Hawaii

BY

FRANK G. CARPENTER
LITT.D., F.R.G.S.



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First Edition

ACKNOWLEDGMENTS

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While most of the illustrations in this book are from my own negatives, they have been supplemented by photographs from the Publishers' Photo Service, Ewing Galloway, the *Philippine Republic*, the United States Bureau of Insular Affairs, the Philippine Press Bureau, the American Rubber Company, the Pan Pacific Union, and the Bureaus of Science and of Agriculture of the Philippine government.

F. G. C.

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THROUGH THE PHILIPPINES

THROUGH THE PHILIPPINES

CHAPTER I

JUST A WORD BEFORE WE START

IN THE journeys through the Philippines that I am inviting you to take with me in this book, I shall have the advantage of you, for it will be my second tour of the Islands. I first visited them soon after the United States took them over, arriving in Manila the day General Lawton was shot. Later I camped with General Joe Wheeler, and rode horseback from post to post of the division under the command of General Fred Grant. On that trip scouts ran ahead to draw the fire of the guerillas, and when I went to the southern islands I was advised to see that my head was well tied to my shoulders before going ashore. Slavery was then common among the Moros, and my story of how I was offered a girl for fifteen dollars excited the ire of our Republican congressmen.

Now it is twenty-five years later, and I am again in the Philippine capital, where, in imagination, at least, I ask you to join me. With Manila as our base, we shall journey to the north and to the south, visiting the more important islands of the archipelago. We shall travel by rail and by steamer, by ponyback and by motor, using, in fact, whatever transportation is necessary to obtain a

view at first hand of the Islands and their people. Everywhere we go we shall see evidence that under American rule the Filipinos have been striding along in the seven-league boots of progress.

When the news of Dewey's great victory burst upon our people at home, every one asked: "What and where are the Philippines? Who lives in the islands, and what shall we do with them?" As to the last question, the Filipinos themselves are now clamouring for a voice in the discussion, and their leaders demand that we answer it by giving them independence.

The Philippine archipelago contains more than seven thousand islands and islets, spread out over an area about one fourth as great as the land surface of the United States. They lie wholly within the tropics, the southernmost islands being only about three hundred miles north of the Equator, while the northernmost land is in the same latitude as Tampico, Mexico. The islands at the north are almost within hailing distance of Japanese Formosa, while the chain of islands at the other extreme form stepping stones over to Borneo. From Manila it is more than seven thousand miles to San Francisco, but the east coast of China is only about eight hundred miles away.

If all the islands of the Philippines were pieced together, they would make a country about twice the size of New England, and nearly as big as Great Britain and Ireland. Many of them are merely green dots in the sea, and only four hundred and sixty-two have an area of a square mile or more. Yet Luzon, on which Manila is situated, is as large as Ohio, Mindanao to the south is the size of Indiana, while Mindoro is about as big as Porto Rico.

In his Philippine travels Mr. Carpenter used every imaginable conveyance, and in penetrating the mountain wilds of Luzon rode for miles in a chair supported on the shoulders of half-naked tribesmen.

Most of the islands of the Philippines are volcanic in origin and many active craters are still to be seen. Less than twenty years ago an eruption on Taal, not far from Manila, killed twenty-four hundred people in a few minutes.

The larger islands are sprinkled with high mountains and furrowed with deep, fertile valleys. Some of the peaks are nearly ten thousand feet high, and several are almost equal in beauty to Fujiyama in Japan. Many of them are active volcanoes, and the soil of nearly all the islands has been built up by eruptions of the past. Agriculturally the Philippines are among the richest lands on earth, and produce quantities of sugar, hemp, coconuts, tobacco, and rice. Yet the area under cultivation is only twice the size of Massachusetts. The vast Philippine forests cover as much land as is contained in Missouri.

And now for the people. There are a little more than ten million of them, or less than half as many as the Islands could support. Although originally most of the Filipinos sprang from the Malay race, there are now no less than forty-three distinct peoples, and the different languages or dialects they speak number more than four score. Nine tenths of the Filipinos are Christians, but there are also several hundred thousand followers of Mohammed, and nearly as many pagans who believe in spirits of forest and mountain. The latter are members of the so-called wild tribes of whom Americans have been told so much that many believe they are typical of the people of the Philippines. Yet they are but a very small fraction of the whole population.

Many Americans thought at the time of our war with Spain that it was extremely poor business for the United States to take over the Philippines. But how has the transaction turned out? We paid Spain twenty million dollars for the Islands. In those days it seemed a huge sum, yet now the Philippines buy from us every year goods worth two and one-half times their purchase price,

while their annual foreign trade amounts to fifteen times as much. Under our flag they have become self-supporting, and all that they have gained they have paid for themselves. Formerly a people without any rights that the Spanish respected, the Filipinos now have their own House and Senate, and most of their officials and teachers are natives of the Islands. Their young men are students in universities in the United States and at home, and on graduating enter the government service and the learned professions. They have a public-school system that is one of the best in the world, and throughout the archipelago children of tribesmen, Christians, and Moros are being taught English, which is fast becoming the first common language of the Philippines.

What is really happening in the Philippines is the building of a new Far Eastern nation. During our journeys we shall see the process for ourselves and it will be my privilege to point out to you, as occasion requires, the changes from the old to the new.

CHAPTER II

FROM ATHENS TO MANILA

IT IS a far cry from the isles of Greece to the isles of the Philippines, yet within the past few months I have come from Athens to Manila, a distance of more than halfway round the world. As I write, there is thirteen hours' difference between my watch and yours in New York or Washington, and if you are lunching to-day in Boston, think of me as perspiring under a thin sheet here in Manila an hour after midnight.

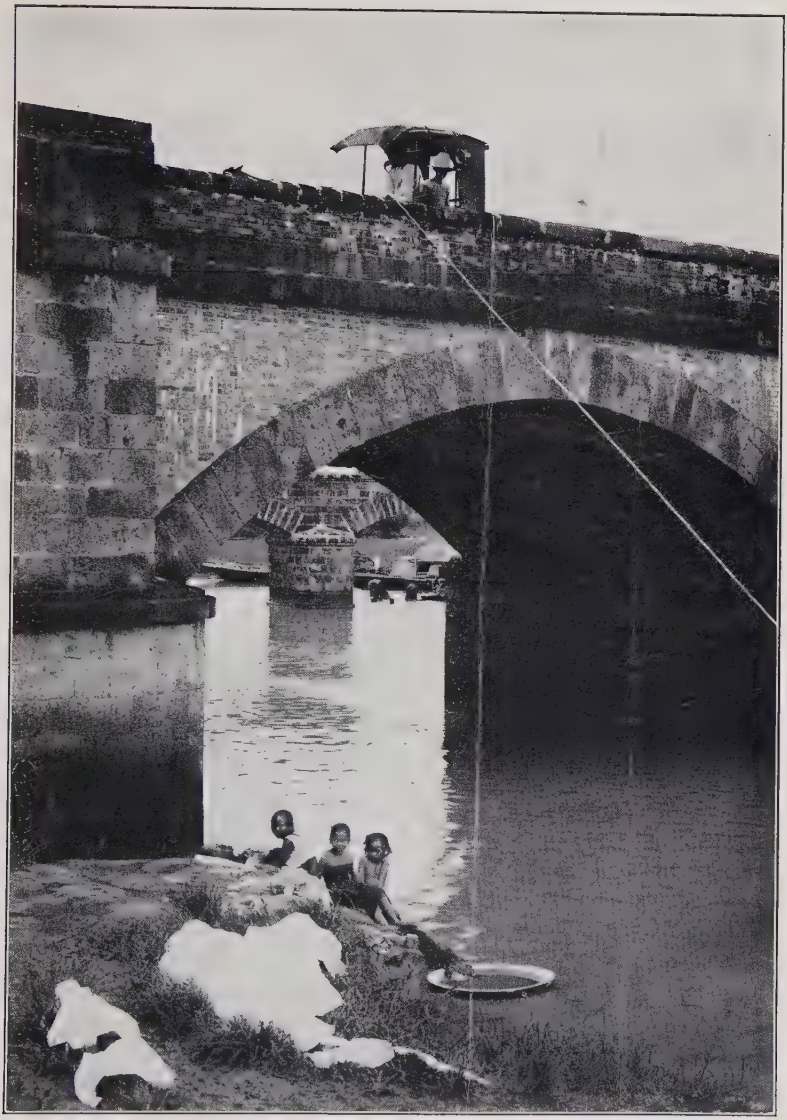
I lost one day on the voyage when, five days out of Seattle, and in mid-Pacific, we crossed the international date line. Moreover, it was Sunday, and one of our missionaries got cheated out of a sermon. We had on board two reverend gentlemen outward bound to redeem the souls of benighted Orientals, and both were anxious to speak. As we left Puget Sound they agreed that number one, who was going to Japan, should have the first Sunday, and number two, proceeding to Peking, should preach on the Sunday thereafter. But on our first Saturday night at sea a sign was posted, which read: "To-day is Saturday. To-morrow will be Monday." And so number one lost out.

From Athens to Naples took two days by sea, and it was twelve days after my ship steamed out of the blue waters of the Bay of Naples that I lifted my hat in salute to the Statue of Liberty in New York harbour.

In two weeks I had covered a distance of some forty-five hundred miles. At New York I took a train for Seattle, travelling three thousand miles from the mouth of the Hudson to the hustling city on Puget Sound; and from there I came on one of our United States Shipping Board vessels to Manila, a distance of almost seven thousand miles. We were twenty-five days on the voyage, stopping four times on the way. Thus I have added some fourteen thousand miles to the total of my jaunts over the earth.

The first leg of my trip across the Pacific was from Seattle to Yokohama, a voyage only a little longer than that from Naples to New York. We stopped a day at Yokohama to leave building material to be used in repairing the damages of the great earthquake. Formerly that city was bigger and did a much larger business than Cincinnati. We found it one mass of ruins, from which it is arising but slowly. Our next port was Kobe, which we reached after a day and a night on the beautiful Inland Sea of Japan. Kobe is to-day the chief port of the Empire, having profited by Yokohama's destruction. It was not hurt a jot by the earthquake and is now as big as Baltimore. We were tied up there for twenty-four hours discharging freight.

Leaving Japan, we took forty-eight hours to cross the China Sea and go up the great Yangtse River as far as Shanghai. That city is growing faster than the blackberries on the top of the Blue Ridge of Virginia. It is already as large as Philadelphia, and will, I should say, eventually surpass our Quaker City. After two days there, we steamed on south to Hongkong, a distance as great as that from Kansas City to New Orleans, which we traversed in two days. We rested at Hongkong twenty-



The first shot in the Filipino insurrection against American rule was fired at San Juan Bridge on February 4, 1899. In these days of peace it is the resort of fishermen and native girls who come here to do the family wash.

Manila is cut up by a network of canals, on which some fifteen thousand people live in boats. One of Uncle Sam's big jobs was cleaning up these waterways, which were indescribably filthy when we took possession.

four hours before we set out on the last part of our journey south by east to the Bay of Manila, a distance, roughly speaking, as far as from New York to Columbus, Ohio.

When God "divided the waters which were under the firmament from the waters which were above the firmament" and "gathered them together into one place," He dropped three fourths of the whole flood into the Pacific and made it the quietest ocean upon earth. At least, it lived up to its name during this voyage. We took the northern, or great circle, route from Seattle, passing within cannon range of the Aleutian Islands. Our ship, one of the finest flying the American flag on the Pacific, gave us a comfortable voyage throughout. I notice this morning that she is still here in Manila harbour, though I suppose she will shortly be ploughing her way back to the United States. In spite of all my years of travel, I feel a pang of homesickness at the thought, and could almost wish I were going back with her.

The ship was so steady that almost no one was seasick, and all enjoyed the good food which was stocked on at Seattle for the voyage and kept in cold storage. Think of sitting on shipboard in the midst of tropical seas and eating reindeer meat brought from Alaska, and ice cream a month old, yet just as good as if ordered in the restaurants of Seattle! There was fresh cream for my coffee at breakfast, and I had a glass of ice-cold buttermilk every meal. It had been frozen in the United States, and was thawed out as needed, but it tasted as though it had just come from the churn. We could even eat the lettuce and other green vegetables without running any risk. This could not be said of garden stuff that we might have picked up at the ports. The Chinese and Japa-

nese sprinkle their growing vegetables with sewage, and the traveller who eats uncooked green stuff raised near the ports of the Orient is likely to have typhoid fever or intestinal disorders.

The Far East seemed to begin the moment I stepped aboard the steamer. The cabin attendants were Chinese, and stewards in white or blue gowns took care of our rooms and waited upon us at the table. As they could not read English, the dishes were ordered by number. We were awakened each morning by an xylophone tapped by Cheuey, the biscuit boy of the dining room, whose yellow face and slant eyes looked out from under a high white cap like that of a French chef. He wore a white jacket and trousers cut Chinese fashion. The radio newspaper was brought to my bunk by Chang, my room boy, who was attired in a blue gown. About half of the passengers were Japanese or Chinese, some in European dress and others in their native garb. At the ports of Japan and China we took on more and more Orientals, and from Shanghai to Hongkong the ship was full of Chinese first-class passengers, a majority of whom wore clothes like our own. The ship's officers were Americans, and our able captain had the nickname of "Fair-weather" Quinn. He had navigated the stormy waters of the Arctic on a steam whaler, managed a halibut fleet, and captained merchant vessels during the World War, before he rose to the command of his passenger cruiser.

Yesterday morning my Chinese boy called me about sunrise. I waked to find the familiar motion of the steamer stilled, and dressing hastily I stepped out on deck. There were green shores within a pistol shot of the vessel. The upper sky was full of fleecy white clouds and

darker cloud masses rested on the tops of green hills. Though it was scarcely six-thirty, the sun was blazing down on the rippling silvery waves, but the air was soft as an early June morning in Virginia. Along the shore were houses, and little white tents studded the beach. As I looked out a hydroplane rose gracefully from the water and soared up into the blue, the sunlight glistening on its white wings.

We were at anchor off the island of Corregidor, which commands the harbour of Manila and is sometimes called the "Gibraltar of the Far East." It is the home of the big guns that will make it hot for any hostile fleet attempting to seize the Philippines, and the point from which the Spaniards thought they could send Dewey's fleet to the bottom of Manila Bay. This magnificent body of water, almost one tenth as large as the State of Massachusetts, is, roughly speaking, a great circle surrounded by low mountains. Its only entrances are two straits, guarded by forts. The straits are so narrow that one could shoot game on either shore from the decks of passing steamers and there is no chance that any vessel will slip unchallenged past the quarantine station opposite which we came to a stop.

In a little while the health officers climbed aboard and all passengers were ordered on deck for inspection. Some of them had just rolled out of bed and looked sleepy and irritated standing around in pajamas and kimonos. There had been a report that there was smallpox in Honkong, our last port of call, and vaccination had been ordered for all of us. A spick-and-span American doctor asked us to show our scars. We had certificates of vaccination, but these would not do; he must see the actual new-made

sores. The men promptly complied with his request, but there was a considerable flutter among some of the ladies who had been careful not to have their arms marred. Finally they blushingly disappeared into one of the cabins where it would be less embarrassing to satisfy the physician.

The health inspection was my first experience of the efficiency of the present government of the Philippine Islands. I had another when I encountered the customs officials. They were Filipinos, clad in immaculate white and speaking precise English, and were extremely polite; yet they insisted upon opening every bit of baggage to see if dutiable articles had been brought in from China or Japan. I am not surprised that there is said to be little or no smuggling into the Philippines.

Less than two hours' sailing from the quarantine station brought us up to the pier in Manila. I found myself turning this way and that, trying to take in some of the many changes that have occurred since I was in the Philippines before. Then we had gained possession of the Islands, but Aguinaldo and his band were still giving the United States troops plenty to do. Guerilla warfare was going on from the northern tip of Luzon to the southernmost domain of the Sultan of Sulu, and our army was only at the beginning of the task of bringing order out of the chaos.

I remember the excitement with which I approached these shores on that trip, at once eager to get all the good newspaper "copy" I expected here, yet at the same time somewhat in dread of what might be in store for me in the midst of the general confusion. Our ship had to anchor some distance out from shore, for the harbour was then too

shallow for even a moderate-sized ocean-going vessel to come up to the city. I climbed down the ship's ladder and leaped aboard a launch, which threaded its way through the mass of shipping lying in the yellow waters of the Pasig River. Rows and rows of little steamers were anchored at the quays and now and then it seemed inevitable that we should get entangled with the native boats tied up along the banks. These cascos are still a characteristic feature of the river. Their awkward-looking hulls are covered over with mats of plaited bamboo to form the cave-like cabins in which the owners and their families live. I landed at the customs house where in those days the examination was perfunctory. Hailing a two-wheeled vehicle drawn by a rat-like pony, I clattered up to one of the most uncomfortable hotels imaginable, where I made the acquaintance of a Filipino bed, but never saw a clean towel. My trunks followed me at great leisure in a cart drawn by a carabao, or water buffalo.

This time I went to one of the finest hostelries in the Orient in a high-powered automobile and my baggage arrived shortly in a motor truck. Moreover, a new harbour greeted my eyes. Manila Bay is far too large to afford a quiet haven and in the past the typhoons that sometimes whip its waters into a frenzy were responsible for many wrecks. For this reason a concrete breakwater several miles long has been built in the shape of a great half moon around the mouth of the Pasig River, shutting out the storms that used to blow in.

This half moon is split in the centre by a narrow passage through which the steamers enter. An area large enough to accommodate all the ships of our Navy has been dredged out so that big ocean liners can sail right up to

the wharves. The earth removed was dropped on the old shore, building up hundreds of acres of new land. This area is now the site of warehouses and other buildings, and parks, among them the Luneta, a promenade along the waterfront, where the people come in the evenings to listen to the military bands. The hotel where I am writing this letter, a huge four-story building of reinforced concrete covering perhaps half an acre, is built on this made land, and across the park are to be seen the homes of the Army and Navy Club, the Elks Club, and other conspicuous structures. Farther down on the other side of the Pasig are the great piers that have risen to accommodate the commerce at this principal gate to the Philippine Islands. The piers compare in length with those of New York, and a half-dozen ocean liners were lying at them as we came in. Among these was a Cunarder, whose seven hundred passengers, including one hundred and ninety-eight widows, are all making a trip around the world.

CHAPTER III

THE PHILIPPINE CAPITAL, OLD AND NEW

TO-NIGHT I have been sitting in the Luneta, the great breathing place for Manila. As the sun dropped behind Mount Mariveles, the headland at the north entrance to Manila Bay, the sky flamed with a gorgeous colour. Gentle breezes from the ocean swept over the park and the lapping of the waves mingled with the murmur of talk or gave way before the stirring music of the military band. All Manila was out in full force, strolling about, chatting between numbers, sitting on benches or in cars and carriages. I have seldom seen so many motors parked at any Marine Band concert in Washington and I know that no ordinary occasion in our national capital would bring out such a crowd.

Among the throng were a few American soldiers, and now and then I picked out an American civilian. But I should say that there were not altogether more than a hundred or two of my fellow countrymen, whereas there were thousands of Filipinos. They were a well-dressed lot. Most of the men wore shoes and suits of white and smart straw or Panama hats. The women and girls were of all ages, from small tots to kindly faced old ladies whose skinny arms showed plainly through the big *piña* cloth sleeves of the national costume. I noticed that, while most of the girls were dressed like our own young women of the States, their cheeks were not painted and

their hair was not bobbed or frizzed, but was generally worn in a thick, shining black braid down the back.

I noticed, too, that quite a number of the men and women wore tags bearing the colours of the Filipino flag, and when a pretty brown-skinned maiden urged me to buy one, I asked what they meant. She explained that they were "liberty tags" and that the money realized from their sale would be spent in helping the cause of Philippine independence. The badges cost from ten to fifty cents and I bought one, more because the saleswoman was charming than because I had yet been able to make up my mind on the great problem of the hour in these Islands.

When I was first in Manila all was political turmoil. A few years before that, almost on the spot upon which I sat listening to the music to-night, scores of insurgents against the Spanish rule had been led out to be shot down by a firing squad, while the people of the governing classes, ranged along the driveway in their carriages, looked on. In 1896 the patriot and poet, José Rizal, was executed near the place where his monument now stands. This evening its steps were crowded with well-dressed Filipinos enjoying the concert. The throng of Spanish men and women who witnessed that execution cheered, laughed, and waved their handkerchiefs when the fatal shots went home. In 1899, the Stars and Stripes flew over the city, but the people were still inflamed over their fight for freedom from Spanish domination and there was much smouldering resentment against the American occupation. When I see what that occupation has done for Manila alone, it seems as if the Filipinos must concede that it has its good points.

The Luneta is the favourite promenade of Manila. In the late afternoon thousands gather here to listen to the band that plays at the base of the statue of Rizal, the national hero of the Philippines.

In the business section of Manila the automobile is fast crowding out the native two-wheeled *calesa,* the drug-store fountains serve ice-cream sodas, and things are pretty thoroughly Americanized. Traffic, however, still keeps to the left, European fashion.

THE PHILIPPINE CAPITAL, OLD AND NEW

I find here a new city. The ragged, dirty, scrambled municipality of 1899, with its mud roads, moss-grown buildings, and multitudinous shacks, has largely disappeared, and in its place has risen a modern metropolis. Some of the best of the old Spanish walled town still stands, but the new is as conspicuous as a patch of fresh wall paper. Our American forces found Manila a haphazard place, with streets wretchedly paved or not paved at all. In some sections the lights used were still kerosene lamps or even burning wicks in dishes of coconut oil; almost the only electric lights were those along the river where steamers tied up at night. On the two street-railway lines the cars were tiny affairs each drawn by a single pony and the drivers heralded their approach by tooting tin horns. We took over a city without adequate sewage disposal and one of the filthiest of its size in all the Orient. We rolled up our sleeves and did not stop until we had made it one of the cleanest places east of Suez.

To-day the streets are well paved and well lighted, and electric cars whiz by me almost everywhere I go. Twenty-five years ago all of the freighting of Manila was done by drays dragged through the mud by American mules and the native water buffaloes. Then the chief means of getting about was a *calesa*, a tiny two-wheeled carriage with the main seat resting on the axle, and a little seat in front for the driver. Now there are motor trucks and automobiles everywhere, and we have here one of the best motor-vehicle markets of the Far East. There are more than fourteen thousand automobiles on the Islands, and several thousand right here in Manila. Practically all of them are made in the United States.

The carabaos and the ponies are still in evidence, however, and one can hire a rubber-tired *calesa* for about fifty cents an hour. The ponies, which are not bigger than three-months'-old calves, remind one of Cinderella's rats before her fairy godmother turned them into the magnificent steeds that took her to the ball.

Manila is built around the old Spanish town called the Walled City, or Intramuros. As it began spreading out beyond the walls and along the flats of the Pasig, it gathered in outlying villages and settlements, which are now municipal wards or districts, each with its distinctive Spanish or Filipino name, such as Tondo, Binondo, Ermita, Santa Cruz, and the like. In a sense, there are three Manilas: the Spanish city within the walls; the native, more or less Malay, town of *nipa* palm shacks, carabaos, and fishing boats; and the modern American Manila that is being developed according to plans that will some day make this one of the beautiful cities of the East.

The Pasig River, which is only twelve miles long from its source in the big Laguna de Bay to its mouth in the harbour, serpentines through the middle of the town, passing close beneath the northern wall of Intramuros. Crossing it are a number of bridges, the oldest being the many-arched Bridge of Spain, close beside which is the fine concrete Jones Bridge. This structure was named for Congressman Jones, framer of the Jones Act of 1916, which gave the Filipinos so large a hand in running the affairs of the Islands. Threading through the city are a number of tide-water creeks, or canals.

The old city, built while the Indian wigwam was the only sort of home on our Manhattan Island, is girdled

by a great stone wall two and a half miles in length, and takes one back to the Europe of the Middle Ages. The wall is pierced here and there by sculptured stone gateways.

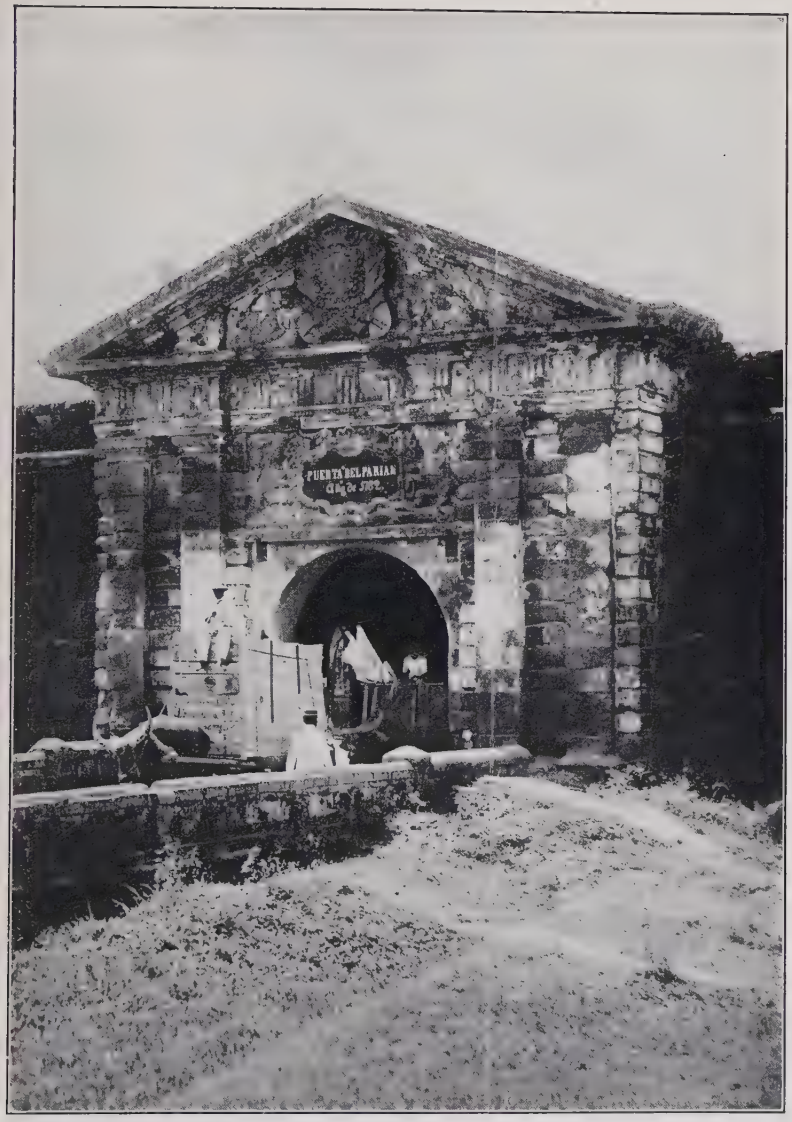
When the Americans took possession, the fortifications included a moat surrounding the old city. It was slimy and foul with stagnant water and the drainage of years. It is said that a Spanish commission once recommended cleaning it out, but the authorities hesitated to disturb the accumulations of mud and rotted vegetable matter for fear the fetid odours and the miasma breathing out of the mass would bring on an epidemic. Our people went at the job with a will, draining the moat and filling it with material dredged from the harbour. To-day the sward on what was once little more than a cesspool is kept shaved like a millionaire's lawn, and it carpets a park and playground for the people. You may see white-coated, brown-skinned men and women chasing golf balls here every day. Another improvement was the cutting of wide avenues through the Manila of 1899. This was part of the plan for modernizing the old city made under the direction of Daniel H. Burnham, who aided in replanning the city of Washington.

Inside the walls the city looks older than it really is. Most of its buildings do not date farther back than 1863, in which year there was a disastrous earthquake. The shock lasted only half a minute but four hundred people were killed, while many times that number were injured. Forty-six public buildings were utterly destroyed, and private homes collapsed by the hundred. The houses standing to-day are mostly of two stories, painted in all the colours of the rainbow, their balconies overhanging

the narrow sidewalks. Their red-tiled roofs are corrugated like a giant washboard; and between the tiles are valleys of emerald green. The birds have dropped seeds in the hollows, and in this moist, hot climate they have sprouted and grown, and made, as it were, veritable gardens of the air. Grass grows also on top of the wall and the old city has many fine trees.

As children, we used to hear a lot about the "pearly gates" of heaven. In Manila I have seen no pearly gates, but everywhere I see pearly windows. The panes are pieces of sea shells cut into squares about half the size of a playing card and perhaps as thick as the blotter you use at your writing desk. They are fixed in a framework of wood, making a checkerboard of mother-of-pearl rimmed with black, or a crisscross lattice work set with these opalescent treasures from the sea. The shells are thin enough to let in the light, while they keep out the heat and the glare. There are hundreds of thousands of such windows in Manila. They wall the second stories of the better parts of the city. My hotel room has a great pearl-studded framework of this kind, which I may slide back on its grooves when I want to let in the winds from the ocean. These shells are now being used, besides, to make lamp shades and lanterns, and I understand they are being shipped to the United States, where it is hoped they will have a big sale.

In the town of Kawit, a few miles from Manila, many of the people earn their living by fishing for these natural window-panes. When found, the shell is almost ready for use, as one half is flat and all that needs to be done is to square it off in a crude machine. At low tide the fishermen wade out waist deep and feel for the bivalves



As in the early days, carabao carts still creak through the gates in the wall of old Manila. Up to seventy-five years ago the gates were closed and the drawbridges over the moat were raised every night.

Modern Manila has outgrown the battlemented walls, two and one half miles around, which enclosed the old city. They were begun by Chinese labourers in the sixteenth century to keep out Malay and Chinese pirates.

Malacañan Palace is the official residence of the Governor-General. His salary of $18,000, which is paid from the Philippine treasury, is said to be far short of his needs in keeping up the style expected of him.

with their toes. The shells are opened by the women on shore, who throw out the oysters inside, and pile up the flat halves for the machines. As Manila alone is said to require five million such window-panes in a year, the shell fishermen are kept busy. At Kawit, by the way, Emilio Aguinaldo lives the life of a Filipino farmer, though I suppose he sometimes dreams of the days when he was head of the short-lived Philippine Republic and leader of insurrections first against the Spaniards and later against us.

The government offices are still in the old city. The Philippine Legislature meets here in the Ayuntamiento, the cornerstone of which was laid in 1735. Back of the Ayuntamiento is the Catholic University of Saint Thomas, founded in 1619, the year, by the way, when the Virginia House of Burgesses first assembled, and a year before the Pilgrim Fathers landed on the Massachusetts coast. Saint Thomas is the oldest institution of collegiate rank under American sovereignty to-day.

In the northwest angle of Intramuros is Fort Santiago, built at the same time as the walls to guard the entrance to the Pasig River. There are many stories about people shut up to die in the dungeons in its thick walls. I do not vouch for their truth, but it is a fact that as late as August 31, 1896, sixty Filipino rebels were crowded into a tiny cell in it, and fifty-six of them died of suffocation. In the course of its history three flags have flown from its battlements—first the Spanish and now the American, while in 1762, when England was at war with France and Spain, the British raised the Union Jack over the fort and kept it there two years.

Yesterday I crossed one of the bridges beneath the

shadow of Spanish Manila and after a few minutes' drive along the north bank of the Pasig came to the Malacañan Palace, the official residence of the Governor-General of the Philippines. He is appointed by the President of the United States, but his salary of eighteen thousand dollars is paid out of the Philippine treasury. He lives in the palace rent free, of course, and light and water are furnished him, but servants' wages and other household expenses must come out of his own pocket. Burton Harrison stated that it costs a governor-general of the Philippines from twice to four times his salary to keep up the style and hospitality expected of the resident of the Malacañan.

I know of no chief administrator anywhere in the tropics who is provided with a home more delightful than this. The Malacañan has huge windows of shell that may be rolled back to let in the air and the spacious rooms have high ceilings. Some of the floors are of old hand-hewn mahogany, polished until it shines like a mirror. Over the Pasig is a wide balcony and surrounding the mansion are unusually beautiful and well-kept gardens, which are illuminated for evening parties by myriads of tiny electric lights.

The mansion was bought by the Spanish government about a hundred years ago to serve as an official country house. At that time the Spanish governors lived in a big stone structure in the Walled City. After this was totally destroyed in the earthquake of 1865, the governor of that day moved temporarily to the Malacañan, which finally became the permanent residence of the representatives of His Majesty of Spain. After the capture of Manila, Aguinaldo asked as his reward for helping the

Americans that the palace be turned over to him and that his troops be allowed a share of the loot from the Spaniards. He was much disappointed to learn that he could not have the Malacañan and that there would be no booty.

The business part of this city of nearly three hundred thousand souls is also on the north bank of the Pasig. Here are big modern banks representing financial houses in the United States, Europe, and other parts of the world, and the Philippine Islands as well. Some of them are of four and five stories, and their equipment is equal to that of the best banks of the States. Near them begins the main shopping thoroughfare, the Escolta, which in many respects reminds one of Madrid or Buenos Aires. Here the signs are in Spanish, with now and then one in English. The old buildings are of Spanish architecture, their second stories having shell windows such as I have described. Reinforced concrete is becoming more and more popular, as it stands up through the earthquakes, and offers good resistance to the wear of a tropical climate. The first building of this material put up in the city was the Manila Hotel. The store fronts are of plate glass, and the iron shutters of my first visit are things of the past. Though the Escolta is well paved, the roadway is not more than thirty feet wide and the sidewalks are so narrow that they will scarcely accommodate more than two people walking abreast. Trolley cars run through the centre of the street, and almost scrape the sides of automobiles and trucks as they go by. Farther on in this business centre are intersecting streets given up to the Chinese, with shops like those of Canton or Hankow. The Chinese do much of the retail business

in the Philippines, and there are more of them in these Islands than in the United States.

In Manila I see few signs of actual want. The men and boys I meet on the Escolta and in all the better sections wear white duck or cotton, and the suits of most of them look as though they have just come from the laundry. The Filipinas wear dresses that cannot but be expensive, and you see on the streets long silk skirts of every colour of the rainbow that swish about pink or white slippers. In the business streets and indeed in most parts of the city, you will find a mixture of American and Filipino dress, especially among the women. The upper part of their native costume is a waist, over which is worn a gauze jacket with sleeves as big around as a three-gallon tin bucket. These sleeves reach to the elbow and enclose the upper arm in a network as stiff as wire. They look a little like elongated rat-traps. The jacket extends around over the shoulders and is fastened neatly across the bust. The coffee-and-cream-coloured neck and shoulders can be seen through the gauze, but the dresses are not nearly so décolleté as some I have seen on our American beauties. The girls and women have an appearance of cleanliness, such as one observes everywhere in Japan but seldom in China. Nearly every Filipino man, woman, and child has a daily bath.

Manila has its poor quarter, however, and the Tondo district contains tens of thousands of the lower classes. Even here the wider streets are of asphalt, but back of them on the outskirts one finds great warrens of houses made of bamboo and palm leaves, in which whole families live in one or two rooms. This district is subject to fires, but as it costs only a few dollars to build one of the

"One of the market women tried to sell me a Filipinne stove, the clay bowl in which the poorer people do much of their cooking. They use charcoal for fuel."

In the Philippines coconut husks are sometimes brought into the market to be sold for fuel, though in other coconut-growing countries the fibre they contain is used to make cordage, brooms, mats, and similar articles.

In Manila markets one finds, among other native delicacies, small octopuses and *balut*, the most highly prized dainties of all. The latter are duck eggs incubated almost to the hatching point and then boiled in the shell.

shacks, they rise like magic from the ashes of every conflagration.

In Tondo the children are barefooted, and the women wear garments such as I have described, except that cotton takes the place of silk. The working men wear only shirt and pantaloons. The shirts are generally of the thinnest of gauze, a sort of cross between mesh underwear material and mosquito netting. The stuff is like that the Filipino ladies use for their dresses and is so delicate that it is often sold for party gowns in America. The shirts are of all colours—white, pink, yellow, and black, and are often embroidered. They are almost always worn hanging outside the trousers for the sake of coolness. Here in the tropics even the thinnest of woollen cloth seems as heavy as a carpet. Under the loose, gauzy clothing, the wind bathes the bare skin, and the shirt tails flap merrily in the breeze as the men walk through the streets. At first the effect is rather startling and one feels inclined to warn the wearers that they should go around the corner and tuck in their shirts. After all, though, it might be worse. They might adopt the suggestion of the scientist who has declared that the ideal costume for a tropical climate is an umbrella—only that and nothing more.

CHAPTER IV

IN THE TONDO MARKET

THIS morning I have been strolling about in the Tondo Market and getting an idea of what people eat away off here more than seven thousand miles from the land of soda biscuit and apple pie. I have seen the real Filipinos, who come in from the surrounding country to buy and to sell. All night the roads were filled with *caratellas*, the native vehicle drawn by ponies; with huge drays and carts dragged along by water buffaloes; and with motor trucks bringing in food and wares of all kinds. These trucks carry passengers as well, and about the markets were buses, each of which had travelled miles through the night carrying two thirds as many people as a street car will hold. The roofs of some of them were piled high with vegetables, meat, chickens, and merchandise of every description. Tons of such stuff gathered along the truck routes, which to a large extent take the place of railways, are brought in daily to the city markets.

Of the many markets scattered throughout Manila, the largest is the one in Tondo. It had just been burned down when we took over the Islands, and, when I last visited it, consisted of ten acres of rude sheds, roofed with straw matting or galvanized iron laid upon a framework of bamboo poles. To-day this market, like all those in the city, is housed in a building of concrete and steel, and

its floor is paved in a checkerboard pattern of black and white stones. There are no walls, so that the winds from the sea and the river blow back and forth through the structure. Every night the hose is turned on and the floors are washed for the morrow. The cleanliness of all the market houses in Manila would put to shame those of many an American city.

I have shopped in the bazaars of Tunis, Constantinople, Damascus, and Cairo. I know those of Hindustan from Bombay to Calcutta, and I have bargained with the pretty, brown-skinned girl merchants of Rangoon and Bangkok. I found the Tondo Market in many respects quite as interesting as any of these. It is a miniature city of buyers and sellers, crowded along streets cutting through this way and that. Every street is lined with cells packed with Philippine goods, in front of which are long counters heaped up with merchandise. In each cell is a woman merchant. Much of the business of the Islands is carried on by women, and I saw thousands of them buying and selling in the market to-day. Short, plump, and well formed, with liquid brown eyes, they stood as straight as the royal palms of the Islands. They were dressed in all colours. Some wore white gowns and jackets, but the majority had on reds, blacks, browns, pinks, greens, and yellows, making a veritable kaleidoscope, continually changing under my eyes. Some of the buyers were expensively dressed, and scores of the sellers had great gold rings in their ears. Many wore the thin, gauzy costume of the Philippines. All the stall-keepers were bareheaded and had their dark hair in a knot on the crown of the head, or else flowing loose in the breeze.

The trip through the market showed me something of

the food resources of the Philippines, which, however, are by no means fully developed as yet. My marketing adventures started, like many good dinners, with the fish. On several long streets nothing but sea food was sold, and the fish were handed over to the customer alive and flapping as they came from the water. The fish bazaar was like a great concrete laundry. The boxes in which the finny tribes were jumping about ready for sale were beside vats of water into which the fish vendors reached their hands to pull out samples to show customers. Some of the peddlers had a score or more of squirming fish on the tables before them, and as I asked the prices of one dealer, about five pounds of her wares jumped out of the box and fell at my feet. The fishwoman scrambled out in pursuit, and capturing the slippery truant, threw it back into the vat.

At certain times the fish markets are full of the mud fish common throughout the Islands. In the rainy season, between June and November, they are so plentiful in the flooded rice fields that sometimes the privilege of catching them is rented out by the landowners. Farther on here in the market I saw seafish, large and small, brought in by the fleets plying out in the bay. The fishing craft are manned and owned largely by the Japanese, who excel as fishermen. Only a short time ago the five thousand lepers of Culion Island, unable to catch enough sea food for their colony, turned their fishing grounds over to some Japanese. The latter now supply all the fish for the lepers on a commercial basis, and send quantities to Manila besides.

I cannot name for you all the varieties of fish to be had in the Philippines, but they are numbered by hundreds.

and are of all sizes, from little fellows no bigger than a button to giants as large as a man. A choice fish is the *lapu lapu*. One was sold while I waited; it was as big as a two-year-old baby, and the fishwife told me it weighed thirty pounds. Near it on the floor, tied to the iron fence by its tail, was a live turtle the size of a wash-tub, slapping the stones with its flippers and rolling its eyes in a rage. As my camera clicked, it opened its mouth and snapped its jaws at me, and I was thankful I was not barefooted, for my toes were in reach. I priced the turtle; it cost twenty-five pesos, or twelve dollars and a half, and must have weighed seventy-five pounds.

Think of eating octopuses! There were little ones in the Tondo Market, each of which would fill a quart measure. Their bodies were about as big as my fist and eight long, slimy, transparent tentacles hung down from their jelly-like forms, so that they looked like a tangle of young snakes on a stick. In the same stall were lobsters, sharks with skins as thick as a blanket, ready to be cut into steaks, little round shiners that looked like twenty-five cent pieces fresh from the mint, and other fish of red, yellow, and blue. Near by were other stalls selling only crabs and prawns.

I found also in the market one of the special dainties of the Philippines, sometimes described as both soup and meat in one course. The Chinese like an egg ten or twenty years old, and most of us are fond of duckling; this Philippine delicacy is a cross between the two. It consists of duck eggs which have been incubated almost to the hatching point and then cooked. The eggs are warmed and packed in rice straw for two weeks. They are then taken out, boiled for a few min-

utes, and served. I bought one for a nickel and peeled off the shell. The embryonic duckling inside was crowded together in a little round ball of yellow and white, faintly streaked with blue, and contrary to what people had told me, it did not smell bad.

As I looked at it I was reminded of the little girl who, sitting beside her mother at breakfast, objected to eating from the shell the boiled egg that had been put before her. Her mother, without paying attention, insisted, until at last the obedient but suffering little one, cried out: "But, mother, must I eat the beak, too?" Not being a young Filipina, she preferred her chickens somewhat mature and her eggs as far above suspicion as Cæsar's wife.

I could not distinguish the beak, or rather the bill, of my duckling, and when I asked my secretary to try it he straightway refused. I thereupon handed it to a Filipino boy, who took it down almost at one gulp. This seems unbelievable, yet, after all, why is eating a chicken so young as this worse than swallowing an oyster fresh from the sea, or sucking out a snail from the shell as I have seen the Parisians do? Indeed, it is not so very many years since some of our States passed laws forbidding the practice of taking unborn calves from slaughtered cows and canning them as fresh chicken.

The eggs I have described are known here as *balut*. They are widely sold, and some localities make a specialty of incubating them. They are often brought to railway car windows to be sold to the passengers along with cakes, candies, and cheeses. One who knows tells me they are so nutritious that two will make a full meal, but so far I have not found any Americans who order them for their breakfast.

Many kinds of live birds were on sale, from tiny singers, no bigger than my thumb, to wild ducks of fairly good size. On a table beside me as I write I have two little feathered creatures inside a cage not as big as an ordinary inkwell. Cage and birds cost me exactly five cents. The cage is made of fine splits of bamboo about as wide as a shoestring and little thicker than the paper on which this is printed. And now, the birds having entertained me sufficiently, I shall stop for a moment, and give them the independence that some of the Filipinos demand. As I snip the bamboo with my scissors they dart off into the sky.

The large section of the Tondo Market devoted to meat stalls is run principally by the Chinese, who sell all cuts of pork, from the snout to the tip of the tail, as well as carabao beef and meats brought in by refrigerator ships. The purchases are often wrapped up in banana leaves and tied around with rice straw. As a rule the Philippine vegetable markets are limited, eggplant and different kinds of sweet potatoes being the mainstays. But the Manila markets have more extensive displays, for peas, beans, and other green foods are raised about Baguio in the mountains of Luzon where there is an increasing interest in market gardening. Fresh strawberries are shipped from there in certain seasons, and to-day I saw turnips and carrots and green watermelons. One of the dainties for sale was a huge purple bud that looked like an ear of corn in the husk. This is cut up and served as a salad. Another Filipino salad delicacy of the same kind is made of the shoot at the top of the coconut palm, which is called the coconut cabbage. This, however, is rare, as the cutting of the shoot kills the tree.

As a rule, the native fruits are astonishingly poor, yet I have been told that these Islands could well support orchards of improved fruits. For example, I saw oranges and lemons and pomeloes, which are like grapefruit, except that they are sweet where grapefruit are bitter. All were inferior both in size and flavour. There were also custard apples with large black seeds embedded in a sweet and rather insipid pulp, and *lanzones*, which grow in white, fuzzy clusters like huge grapes and have at the same time both a sweet and an acid taste. Though pineapples grow in the Islands, comparatively few are eaten, as the native pines are not considered wholesome. They are raised here chiefly for the sake of the fibre from which the beautiful *piña* cloth of the Filipina's costumes is woven. Yet millions of dollars have been made from pineapples grown in Hawaii and canned there, not only for the American but for the Philippine markets as well. There are many kinds of bananas in the Islands, though they are mostly small and have a puckery taste. Occasionally one can get very good ones, but the supply is always limited. Mangosteens, with their delicious crimson and white pulp, grow in Mindanao but cannot stand shipment even for such a short distance as that between Zamboanga and Manila. I noticed, too, the *cincoma*, rather like a sweet turnip, which the natives eat as we do an apple. Another fruit is that of the sapodilla tree, from which comes chicle like that for our chewing gum.

Leaving the fruit stalls, I passed the bazaars selling rice and strands of spaghetti as fine as spun silk made by the Chinese. I went on to where cigars, tobacco, and betel are sold. Everyone smokes in the Philippines, and it is safe to say that a large majority of the common people

One of the most plentiful of Philippine fruits is the papaya, which grows wild in most of the Islands. It tastes somewhat like our melon and contains so much pepsin that doctors often recommend it for people with weak digestions.

The Chinese own most of the retail shops in the archipelago, but where one is run by a native it is almost invariably in the hands of a woman. The Filipina takes naturally to business and is generally a shrewd bargainer

also chew the betel nut either in public or in private. The custom prevails throughout Indo-China, Malaysia, and all the islands of this part of the world. I stayed a moment beside a stand on which the nuts were piled with heaps of wet lime and palm leaves beside them. A girl came up to buy, and as I looked on she picked up one of the nuts and bit into it. When she opened her mouth her gums seemed to be bleeding; her tongue was bright red, and her teeth appeared to drip blood. I am told that the Filipinos acquired the habit from the Malays who overran these Islands centuries ago and intermarried with the aborigines.

Going on, I took a piece of white root out of a basket on a counter and tasted it. It made my tongue smart, for it was ginger. This root grows abundantly in the woods of the Philippines, but so far none of it is exported. With it the natives make a weak tea to drink with their rice and fish.

Another plant that grows wild almost everywhere throughout the Islands is the castor bean, the source of castor oil. During the war these beans commanded great prices, because of the enormous quantities of castor oil used as a lubricant in the airplane engines of the Allied forces. Some of the nuts grown here are so rich in oil that if you touch a match to them they will burn like a candle. This is true of the *pili* nut, for instance, which is served, as we like salted almonds, throughout a meal. Its texture is floury, and it is sweetish in taste.

Looking at the great profusion of food in the market, it seemed to me that the cost of living among the Filipinos must be exceedingly low. On the contrary, my inquiries show that foodstuffs are high, and that the people complain

of profiteers quite as much as we do at home. One reason is that while the soil of the Islands is rich, the agricultural methods in general use are too inefficient for large-scale production at low cost. Moreover, labour is expensive as measured by its results.

CHAPTER V

THE FAIR FILIPINA

SLIP into a seat beside me at one of the Manila theatres and between the numbers on the programme look about you at the people that pack it from pit to gallery. Nowhere, I venture, will you get a better cross-section of Filipino society, more especially of the feminine element. It is the night before Easter Sunday. This morning as soon as High Mass was over the Cathedral bells pealed forth and immediately the bells of the other churches throughout Manila took up the refrain. After two days of solemn observance of the agony and crucifixion of the Saviour, the city has resumed its normal life. The motion-picture houses are going full swing and the theatres are open. The women, particularly, are out in numbers, for, as usual, it is they who have been most pious in their religious devotions, and now they are ready for diversion.

The play scarcely deserves much mention. It is a typical Easter week performance for this part of the Catholic world. It is called "Jesus Christ" and gives incidents in the life of Christ, though the dark story of the crucifixion is not included. That is not considered suitable to the gaiety of an Easter Even performance. The entertainment is interspersed with: songs, dances, and vaudeville acts, and the last number, I see, will be a

motion picture showing the latest daring exploits of a popular American movie queen.

I think I should have left some time ago, except for the audience, which I find far more interesting than the performance. All the seats are full, and there are perhaps five hundred dark-skinned people dressed in their best in the boxes and pit. On all sides of us there are Philippine girls and women of every condition and age. Look for an instant at this girl at my side. I pretend to take notes of the play as I write this description, and since it is safe to say that the little lady cannot read my scrawl, she will not object. What a pretty creature she is! If she were white you would call her a daisy, but as she is brown the name "tiger lily" will fit her much better. She is a plump little thing, with liquid black eyes and a skin as soft and smooth as cream. Her luxuriant black hair is put up in a great knot just back of her crown, and held there by a comb of gold set with rhinestones. Sneak a look out of the tail of your eye at her small brown ears, with the big rings in their lobes, and at the same time notice that gold chain wound round her neck. Maybe you have thought of Filipinas as dirty, ragged, and poor. This one, at least, must be well-to-do, and there are scores just like her all over the house.

How well the black gauzy dress shows off the beauty of her neck. Her costume consists of a low-cut jacket, with great bell-like elbow sleeves standing out from the arms. Her embroidered undergown also is cut low. About her bare shoulders is pinned a kind of kerchief. I say her shoulders are bare, for the kerchief and jacket are of such sheer stuff that through the meshes you can see the plump, dimpled shoulders and arms.

I venture you never saw so many beautiful arms and necks at one time. There are few skinny bodies, and the collar bones seldom show. These women have beautiful hands, and perfectly shaped arms, with sweet little dimples at the elbows. Some of the Filipino faces are homely, but you will rarely see a young woman who is not straight and upstanding. Even in the country the poorest of the women are erect and well formed. Their erectness comes from their carrying burdens upon their heads and the fullness of the shoulders from pounding rice, a daily household task that develops the muscles of the upper part of the body.

That maiden over in the box on the right wears the same kind of gauzy costume as the girl beside me, but its colour is Indian red. All about us there are girls with lavender dresses, yellow dresses, white, green, and blue dresses. Everyone follows her own taste in colours, but the gowns are all of the same filmy texture, and all cut in the same way. The girl in red has a lighter complexion than most of the women near us. Her eyes are slanting, and her features somewhat resemble those of that Chinaman down in the pit. She is a Chinese *mestiza*, a type of hundreds of girls you may see in Manila. Her mother is a Filipina, and her father is one of the rich Chinese merchants of Manila. There are some twenty thousand Chinese men in the city but scarcely a handful of Chinese women, so the men often take native wives.

As we look again over the theatre we notice that every girl is wearing jewellery. Even the most poorly dressed have earrings of gold. The Filipinos invest much of their money in gold and silver trinkets. When a girl gets a little ahead she buys a new ring, and later on she may turn a dozen rings into a diamond.

Some of the largest stores in Manila are jewellery stores, and there are small booths at which gold, silver, and diamonds are sold. You will see women in black sitting upon the streets with cases of earrings and combs before them. I am told that the Philippine women understand the value of diamonds. They can tell whether a stone is of the first or second grade and can estimate closely as to its price.

The fact is, the fair Filipinas, high and low, have good heads for business. I have heard of the wives of large landholders who practically ran their husband's estates and few Filipino men of affairs fail to consult their wives about important deals. Sometimes the wife of a landed proprietor may supervise a small store and keep at work a weaver or two and maybe two or three embroidery women, whose output she will send to Manila for sale.

Among the wealthy Chinese *mestizos* it is quite customary for the girls of the family to go into some sort of money-making business. I have heard, for example, of a young Chinese-Filipino girl who was given five dollars to begin her trading. She bought some sugar, sent the family servants to gather guavas from the woods, and later had them go out and sell the jars of jelly the cook had made of the fruit. Her capital, soon doubled, was next invested at wholesale prices in handkerchiefs and fans, which were sold at retail by a servant. Finally, from her small beginnings, the young woman built up a good trade in jewellery and had a tidy sum in the bank. The upper-class Filipina does not do much herself, but shows real administrative ability in directing her servants, of whom she generally has a large number.

At least two of the important industries of the Islands

are largely dependent upon the Filipina's nimble fingers. These are embroidery and hat-weaving. The embroidery business draws from all classes of women, from the lady in the stone house, glad to make a little extra money and while away idle hours doing work she loves, to the woman in the cane hut, who thus helps to fatten the family purse. In 1913 the embroideries exported were valued at a little more than one hundred and fifty thousand dollars; in less than ten years the value had grown to more than thirty times that sum.

The nuns who came over to establish convents after the Spanish took the Philippines taught the natives the exquisite needlework for which the convents of Europe were famous. When the Americans came in, someone had the bright idea that this accomplishment might be turned to account; so he distributed materials for blouses on which crude designs had been drawn in pencil and the Filipinas executed them in the finest of embroidery. The finished work was peddled from door to door and some found its way to America, where it had no great sale because of the crudity of the designs and because by the time it got there the fashions in blouses had changed. From such beginnings there slowly developed a business in the hand-embroidered underwear for which there is now a ready sale in the States. Washington merchants have told me that it is becoming harder and harder to meet the growing demand for Philippine embroidery. In Manila there are a number of factories in which the materials are stamped to be sent out to various workers to be done at home, then returned and made into finished garments at the factories. The women of one community may be noted for making good scallops while those of another

will excel in the lace-like *calado* work, so that often a garment will be routed through several different places before it finally gets back to the distributing house in Manila. The embroidery is always done by the women, but the designs are made by men.

About one hour's travel out of Manila will bring one to Baliwag, the hat town. Walk up the streets of the village and you will see squatting under the trees clusters of women chewing betel nut and gossiping as their fingers fly at the making of the cheaper grades of hats. Others will be working slowly and with great pains fashioning under water the finer kinds that cost our dandies so much good American money.

Many of the fourteen thousand employees in the cigar and cigarette factories of Manila are girls or women, for they do their work more rapidly and skilfully than men. The women do a vast amount of the farm work. You see them everywhere in the fields, threshing, planting, and harvesting rice, and you seldom pass a country house without seeing one or two women at work hulling rice for the family meal. In the Philippine markets nearly all the stalls are kept by women. Besides selling meat, vegetables, and fruits, they have booths for shoes, clothes, and all kinds of merchandise. Many of them take their goods from their houses to the market every morning and bring them back at night. Business with them is mostly a matter of bargaining, and the foreigner is indeed shrewd if he gets the better of them in a trade. I understand they prefer to sell to Filipinos rather than to Americans, since their own people know better how to make a real sport of haggling.

One street in Manila is largely given up to native women

From early childhood the Filipina is accustomed to society. As a little girl she often accompanies her parents to dances and parties, and by the time she is fourteen or fifteen she is receiving serious attentions from men.

Embroidering and hat-making for export, chiefly to the United States, have become important home industries among Filipino women. The earnings of the hat makers range from twenty-five to sixty cents a day.

The Filipinas go in for baseball quite as enthusiastically as their brothers. Girl teams compete at the annual Manila carnival contests and a famous nine once played in the Far Eastern Olympics at Shanghai.

who sell dress goods. Their little stores, not more than six feet square, are walled with cases containing the finest native fabrics—*piña, jusi,* and *sinamay.* A counter separates the shopkeeper from the street. She has barely room enough in the store to sit down and is able to reach everything about her as she sits and deals with her customers. Although machine-woven materials are taking a larger and larger place in the Philippine market, these native handmade cloths still have a good sale, and in many towns and villages there are looms in nearly every home. *Piña,* the beautiful pineapple tissue, makes the sleeves and kerchiefs of the well-to-do, while *jusi,* a mixture of pineapple fibre with China silk, is the favourite wear of the wealthy. *Sinamay,* woven of hemp, is a coarse though serviceable fabric, and is worn by the poorer classes, as waists by the women and as shirts by the men.

Generally speaking, the aristocracy of the Islands are the Spanish *mestizos,* those Filipinos who have a considerable admixture of Spanish blood. Among them are the large landholders, for this class has not gone extensively into trade. Next to them, perhaps, are the Chinese-Filipinos, many of whom have grown wealthy through their business deals. Besides, the mixture of Malay and Chinese strains apparently tends to improve both races, for some of the leaders among the Filipinos claim Celestial fathers or grandfathers. One of the great men of the hour in the Islands is Osmeña, the Speaker of the House, who has in his veins a goodly proportion of Chinese blood. Class distinctions are not rigid, however, and with widespread education and greater opportunities for money making, middle-class Filipinos are rising in the social scale, although in Manila there is a set of Spanish-

Filipinos that still hold somewhat aloof from their darker-skinned kinsmen. In the country, of course, there is a sharp line between the dwellers in the stone hacienda and the occupants of the cane huts.

The Philippine maiden is "out" rather sooner than her American sister, for from early childhood she is used to mingling freely in whatever society there is. She often accompanies her parents to dances and parties and by the time she is fourteen or fifteen, she begins to have serious attention from men. Among the upper classes the usual age for marriage is seventeen or eighteen, though the opportunities for higher education offered since the Americans took charge of the Islands has tended to raise this age. I have learned from American teachers that the Filipino boys of twelve or fourteen, so far from affecting to hate girls as do our youths of that age, generally have sweethearts to whom they write the most eloquent love notes. Sometimes a boy's friend will act as go-between and plead the cause of his chum. Young people, even engaged couples, are seldom alone together, and any display of feeling is considered in dreadful taste. Even newly marrieds maintain the strictest reserve when they are in the company of others. Engagements are not long, and many marriages are love matches. The young man meets his sweetheart at a ball or a reception and afterward goes to call upon her, being always received in the presence of the parents or of the older women of the family. The man may stand outside on the street and talk to the girl through the window, but it is not the proper thing for him to be alone with her in the house, or to go out with her unless she is accompanied by a duenna.

After marriage a woman's property is kept separate from that of her husband and she has entire control of it. If she lends him her money to go into business and he fails she ranks as a creditor of the second class. If she dies, nearly all of her estate goes back to her family. A man who is himself almost destitute may have children who are very rich through their mother.

As I have said, the upper-class married woman runs a considerable establishment. Let me give you a picture of the kind of home headed by her less fortunate sister. During my walks through Manila I have entered many of the homes of the common people. One of those I visited to-day was that of a seller of *piña* cloth. The man probably considers himself well-to-do and comfortable in his home. The doorsill of the house was flush with the street and upon entering I found myself not in a room, but in a garden about ten feet wide and twenty feet long. It was roofed with thatch, through which great banana trees had grown up and extended their broad leaves, making a dense shade over it. Tied to one of the trees was a game cock. There were seats on each side of the walk that ran through this garden into the house.

Passing inside, I went through a narrow hallway with one little room on each side, and into the living room, which was also the dining room. This room, which was about twelve feet square, was ceiled and walled with board blackened with smoke. The floor was of square red bricks, and the only windows were holes in the wall at the back. On one side was a table-like ledge, on which were sprawling a two-year-old boy and a naked baby, and on the other, close up against the wall, was a table with a long bench before it, the eating place of the family. There

were one or two chairs, and a wicker lounge, which was hung up to the ceiling to be kept out of the way until needed.

At the front of this room, on each side of the door, were tiled steps leading to the bedrooms along the hallway by which I had entered. At the invitation of the mistress of the house I walked in and looked at them. Each room was just wide enough to hold a narrow bed, consisting of a framework of bamboo poles with strips of bamboo somewhat like the half of a fishing rod nailed across the framework so that the rods lay lengthwise. It is upon such beds that many Filipinos sleep. Others lie upon boards, but the best bed is a great fourposter, with a cover of cane made of strips of bamboo woven together across it, just exactly like some of the cane-seated chairs that we have at home. Upon this hard foundation is laid a thin mat of woven straw and this, and this only, forms the bed.

This was the kind of bed I had at the old Oriente Hotel on my first trip to the Philippines. I paid seven dollars a day for my room, I remember, and was allowed one sheet a week. The rest of the equipment of my couch consisted of a mosquito net canopy, a Filipino pillow, a little round roll stuffed with something that wadded itself into a hard knot and gave me a stiff neck, and the "Dutch wife," familiar to any one who has lived in Java. This is a round pillow about four feet long and hard as a log. Over it one drapes a leg or an arm so as to get a circulation of air between the body and the bed. It is a surprising relief in a hot climate. Another surprise to me was the fact that after awhile I got used to my hard native bed, and the thought of a hot, soft mattress was actually uninviting.

But to return to the home of the Filipino merchant. Leaving the bedrooms, we went down through the dining room and out into the kitchen, a shed opening into a little yard about eight feet square, in which a couple of ducks were paddling about in the slop from a low wash-tub. As I looked at them I heard the vehement crowing of a rooster at my right and turned around to see that there was another game cock tied under the kitchen table. The table itself was much like a crate of bamboo slats, so wide apart at the top that the scraps could fall through to the chickens under it.

At the right of the table was the cook stove. And such a stove for a family of ten, the number the woman told me lived in the house! It was merely a ledge of bricks and mortar running along one side of the room. On the top of the ledge, hollowed out of it, were four holes, each about the size and shape of a tin wash basin. Upon each of these a black bowl of clay rested over some sticks about the size of your finger. These were alight, and the petty fires were cooking the dinner for the family. There was no outlet for the smoke except a hole in the wall high above the stove, and everything about the kitchen was blackened with soot. The bowls contained rice, fish, and a stew of pork and vegetables. One pot had beans and fish boiling in it. I am told that the beans and the fish are well mashed and mixed together after they are cooked, and that they are eaten with salt.

Rice is cooked in all sorts of ways. It is served with fruit, is put into bread and cakes, and is steamed as we like it in the United States. A favourite dish among the children is made of sweetened rice flour stuffed into short bamboo tubes, which are plugged up at the ends and

thrown into boiling water. Another native food is the *camote*, a kind of sweet potato, though not so good as our yam. The only cooking utensils in this house were a wire gridiron, two coconut ladles, and some clay bowls.

The Filipino diet is somewhat monotonous and lacks the right proportion of green foods. Neither, according to our standards, is the Filipina a good cook. But these shortcomings are being remedied by the propaganda of the Philippine Bureau of Health and the Bureau of Science and by the cookery taught in the public schools.

The Filipinas are progressive. A clipping from to-day's paper states that women are crowding the men in several courses open to both sexes in the University of the Philippines, and in other coeducational institutions. Last year out of forty-six graduates in pharmaceutical chemistry, forty-two were women; out of eleven taking medical degrees, four were women, and out of a total of four hundred and eighty-eight receiving degrees from the University, one hundred and ten were women.

One of the most thriving women's organizations in the Far East is the Manila Woman's Club, which, though not much more than fifteen years old, is already a power not only in the city but throughout the Islands. It has started other clubs in the provinces so that to-day the Federation of Women's Clubs in the Philippines has some four hundred member organizations with a total enrollment of approximately twelve thousand. In one of his annual reports Governor Wood said:

> One of the strongest influences for building up interest in proper municipal and provincial government comes from the numerous women's clubs. They have done excellent work, especially in behalf of child welfare, public health, public instruction, private and public

morality, and the stimulating of interest in local governments—municipal and provincial. Indeed, their interest has been so keen, their policy so unselfish and sound, that I have recommended to the Legislature that the suffrage be extended to women to the same extent and under the same conditions as to men. I am convinced that the extension of suffrage to women under these conditions will be to the advantage of the people of the Philippine Islands.

CHAPTER VI

GOING TO SCHOOL IN MANILA

GEE, but I'm tired!" The small boy's lingo comes naturally to my tongue, for have I not been going to school myself to-day?

I have spent hours driving about in a car to the public schools of Manila, trying to get some idea of the educational work going on here. As yet I have been able to visit only about one tenth of the graded and high schools, and have not got around to the normal schools, trade schools, private schools, academies, and the several large universities of the city. Manila has ninety-one public school buildings, and a total of sixty thousand pupils are in daily attendance. There are fifty-odd thousand boys and girls in the day schools, and one in five of the whole population goes to a public school of some kind or other. In addition there are about twenty thousand students in the private schools.

But figures mean nothing without concrete comparisons. Let me show you how this school attendance compares with that of some of the big cities of the United States. Manila has about as many people as Seattle or Indianapolis, but each of these cities lags far behind it in the number of pupils in its schools. New Orleans, with eighty thousand more people than Manila, has but two thirds as many children going to school. Louisville, which is only a bit smaller than Manila, has about half

Almost every village home has its handloom, on which are woven *piña,* a pineapple tissue for the sleeves and kerchiefs of the well-to-do; *jusi,* a mixture of pineapple fibre and silk for the wealthy; or *sinamay,* the coarse hempen cloth worn by the poor.

More than a million students are going to school in the Philippines. The Islands have almost eight thousand public schools, many of which are handsome modern buildings, such as this high school at Batangas.

Though nearly all the teachers in the Islands' schools are natives, the instruction is in English. In twenty-five years we have done more to give the Filipinos a common language than the Spaniards did in three centuries.

as many school children, and Washington, the super-intelligent capital of our nation, while it is two hundred thousand ahead of this capital of the Philippines in population, has one thousand fewer school children.

There is no such thing in these Islands as

> . . . the whining school-boy, with his satchel
> And shining morning face, creeping like snail
> Unwillingly to school.

On the contrary, I am told that in Manila the Filipino children whine if they are kept out of school; they go on the run, and the great trouble is to put up new school buildings fast enough to accommodate them. During the last half decade attendance has been increasing at the rate of four thousand pupils a year.

Parents and children make all kinds of sacrifices so that the younger generation may get their schooling. Sometimes the interests of an entire family are more or less subordinated to sending the member showing the most promise to a high school or university. Many students work their way through. For example, as I have ridden up and down in one of the hotel elevators I have talked with the bright-faced young fellow that runs it. Though he wears his shirt flapping outside his trousers, and has not affected the European costume donned by many of the educated Filipinos, he is a college man. In good English he tells me that he came to Manila from a country school and has worked his way along until he is now in his fourth year at the University of the Philippines. Next year he will take the examinations for the Civil Service; if he fails he expects to study law or go into business.

Perhaps you are wondering about who pays the bills for training the fast-growing army of Filipino students. But don't worry! The money does not come out of your pockets or mine; every cent of it is paid by the Filipinos. The yearly public-school bill has now gone beyond eleven million dollars, which is a little more than one dollar a head, or five dollars per family, for everyone in the archipelago.

Furthermore, the Philippine schools are run by the Filipinos. Of the almost twenty-five thousand teachers only a little more than three hundred are Americans. Yet all the instruction is in English. Think of eleven hundred thousand Filipino children going through their school work in English, day in and day out, and you have one of the astonishing aspects of the changes wrought in twenty-five years.

It is a wonderful work that Uncle Sam has been doing in these Islands with the ardent coöperation of the people. When first I visited the Islands education was within the reach of only a small number. The majority of the Filipinos had had no schooling whatever, eighty per cent. were densely ignorant, and not one man in ten could read or write. The few schools, such as they were, had been broken up by the war and the troubles with the Spaniards, and about the only instruction was that offered by the Friars, who as teachers had not progressed much beyond the Middle Ages.

But even then, so short a time after the beginning of our occupation a start had been made. It is often said that the Spanish conquerors came with a sword in one hand and a cross in the other. We may have gone into the Islands with a gun, but we carried also a schoolbook.

GOING TO SCHOOL IN MANILA

Along with the American troops entering Manila in August, 1898, came Father W. D. McKinnon, chaplain of the First California Regiment. General Merritt made him superintendent of education and within three weeks he had opened seven schools in the city. Before a year had passed, forty-five hundred pupils were enrolled in the primary schools of Manila. Soon after, Congress authorized the appointment of one thousand American teachers for service in the Philippines. The Secretary of War furnished an army transport to take the volunteer instructors to the Islands and in the summer of 1901 six hundred sailed by way of the Suez Canal. They landed in Manila in August, just three years after our troops had marched into the city. I should say that the coming of this regiment of teachers was a more remarkable invasion than that of our soldiers.

These six hundred men and women and the several hundred more that soon followed were at length scattered throughout the archipelago from the hills of northern Luzon to the habitats of the wild Bagobos about the Gulf of Davao and the strongholds of the Moros in Mindanao. Four young men arriving in the second shipload were killed by a robber band in the Island of Cebu, while others gave up their lives in fighting the frightful cholera epidemic that scourged the Philippines soon after their arrival.

Stay-at-home Americans can never appreciate the task of the American schoolma'ams and masters, suddenly thrown into strange and well-nigh primitive surroundings. They were told to go ahead and give an American education to children of a strange people who knew hardly one word of English. Not only must they teach the children,

but at the same time they must train Filipino assistants; for it was impossible for the American teachers to take care of all the pupils who rushed into the new schools.

Only about seven per cent. of the population of the Islands could speak Spanish; eighty-seven different dialects were in use and the people were divided into more than forty ethnographic groups or tribes. Even the Christian Filipinos spoke sixteen dialects, and these were so varied that the better-class man of Cebu or Negros could hardly make himself understood by the man of Luzon. The Moros had a dozen different dialects, and the Mohammedans of the Sulu Islands could hardly understand their fellow Moslems living around Lake Lanao in Mindanao. It was the same all over the Islands. There was no common language, and to the native, English was as puzzling as Sanskrit.

To-day the twenty-five thousand teachers are using only English in their classrooms, and English is the language in which more than one million children do all their school work. At first the native teachers had to work hard to learn the new tongue fast enough for their pupils. Some of them studied it at night, with the help of the American teachers, and taught next day what they had learned. The Filipino teachers of to-day are graduates from normal schools, who read and speak English fairly well, though frequently with a peculiar accent. There is hardly a village in the Islands that has not a number of English-speaking boys and girls, and the younger generation is growing up with English as its thought and book language.

It is true that the masses of the people still use their native dialects. The Manila newspaper with the largest circulation is printed in the mother tongue of the Tagalogs,

who are culturally the most advanced of the Filipino groups. This is the language of more than fifteen hundred books and many periodicals are printed in it. More of the popular songs, love stories, and poems are written in Tagalog than in any other dialect of the Islands. Yet in twenty-five years we have accomplished more toward giving the Filipinos a common language than the Spaniards did in three centuries; for, according to the latest census, nearly nine hundred thousand people of the Islands speak English, while only about seven hundred thousand speak Spanish. Persistent teaching in the public schools and the fact that English is becoming the commercial language of the Orient are having their effect. Manila papers printed in Spanish carry duplicate editorials in English, street signs are in both tongues, and the word "peso" is often changed to "dollar" in designating sums of money. In another generation English will be common throughout the length and breadth of the archipelago.

I have visited nearly one third of the ninety-one school buildings of Manila. The schools are practically the same throughout the city, and those I saw were typical of the rest. All are decorated with flowers and tropical plants and most of them have school gardens. They have playgrounds as large as those of schools in the United States, and on the whole, the buildings are more artistic and pleasing in appearance than our schools and their surroundings. Over every one float the American and Filipino flags, which the children salute each morning. Also they sing every day "The Star-Spangled Banner," following it with their own national song, "Philippines, My Philippines" to the tune of "Maryland, My Maryland." It reads as follows:

PHILIPPINES, MY PHILIPPINES!

I love my own, my native land, Philippines, my Philippines.
To thee I give my heart and hand, Philippines, my Philippines.
The trees that crown thy mountains grand,
The seas that beat upon thy strand,
Awake my heart to thy command, Philippines, my Philippines.

Ye islands of the Eastern sea, Philippines, my Philippines,
Thy people we shall ever be, Philippines, my Philippines.
Our fathers lived and died in thee,
And soon shall come the day when we
Lie down with them, at God's decree, Philippines, my Philippines.

Yet still beneath thy ardent sky, Philippines, my Philippines,
More num'rous sons shall live and die, Philippines, my Philippines.
In them shall breathe the purpose high,
The glorious day to bring more nigh,
When all may sing, without a sigh, Philippines, my Philippines.

In all the buildings are pictures of George Washington and others of our national heroes, while on many a schoolroom wall is a portrait of Rizal, the martyred poet-patriot who paid with his life for his opposition to the injustices of the Spanish régime.

The schoolhouses are mostly two stories high, the old ones of concrete and the new ones of wood on concrete foundations. Many of them have from forty to sixty rooms, and an enrolment of one or two thousand children in a single building is by no means unusual. The construction is adapted to the climate. A common type is built in the form of a hollow square with wide galleries along each story, overlooking a schoolyard bordered with plants and flowers.

The broad, lofty halls are floored with smooth red tiles kept as clean as those of your bathroom. Many of the

walls have a wainscoting of native mahogany reaching as high as my head, while the woodwork above that, including the ceiling, is usually painted white. Some of the classrooms have floors of mahogany so highly polished that they shine like fine furniture. It is almost as if the children were walking on the tops of pianos. The use of shells for window-panes gives a soft, subdued light on the desks, in contrast to the glare of the tropical sun outside. The walls between the rooms are really doors of mahogany extending almost to the ceiling, which can be folded so that within a few minutes a whole row of rooms on one side of a hall can be thrown into one. Every room I saw was as clean as a pin.

I think the Filipinos are naturally clean, but the school regulations require that every boy and girl must come to school with his clothing in order, with clean face and hands, and, what is more, with well-kept finger nails. As I went through the schools I picked out a boy and a girl now and then and made an inspection. Not a finger nail was in mourning, and the little hands seemed fresh from the wash basin. I did this in different rooms, for, you know, sometimes children are dressed up for visitors. I can assure you they were not in this case.

I noticed that a number of the little girls had lace trimming on their collars and dresses. I doubt not many had made their own, for the embroidery teaching begins as soon as a child enters school, and some of the beautiful pieces sold in the States are made by the pupils. The boys learn to make hats and baskets, and, like the girls, commonly earn quite a little money with their handicraft. There is a period of industrial work every day, and no girl can enter the high school without having passed courses

in embroidery, plain sewing, dressmaking, and the rudiments of running a house and the care of infants. I am told that after the first few grades the girls make their own clothes. As I went through one school I saw some of the girls sewing on pretty garments and in another a score of boys were decorating and lettering the diplomas of their class for the coming graduation. The work was extremely well done.

We strolled through the buildings, stopping now and then to talk to a teacher, to listen to a song in English, to hear a class recite its lessons, or to ask the children questions. I was charmed with the teachers. Those I met were educated women, who spoke English, of course, and seemed to have a thorough understanding of their business. Some of the school principals were men; they were clad in white duck and looked as though they had just come out of bandboxes. It seemed to me that all the pupils I met were every whit as well bred as the average of our children at home. The American teachers tell me that the little Filipinos are rather easier to manage than young Americans of the same age.

All of the children spoke English, and their songs in English were almost without accent. I enjoyed their singing, for the Filipinos have good voices and the souls of musicians.

I wish you could see a Manila school during recess. At exactly the same minute in every school building in the city a gong calls the pupils to order. The piano plays, and each class forms in line and enters the halls. They march double file along the galleries and down the stairs to the playground. The classes of the same grade, boys and girls, face one another from the opposite sides of the

The school playground exercises are at the foundation of the interest in athletics that Americans have inculcated in the Philippines. In the Far Eastern Olympics, in which they compete with the youths of China and Japan, the Filipinos have made a fine showing.

Despite their fertile soil and favourable climate, the Islands produce comparatively few vegetables; but with the school-garden movement there has been a noticeable increase in home gardening and the quantity of fresh vegetables eaten.

area. At a signal from the teacher they begin their exercises. In the school I was visiting to-day during the recess period some of the fourth-grade boys and girls were running races. In another part of the ground they were playing leap frog and farther on "Ring Around the Rosy" or "London Bridge Is Falling Down." But I cannot describe all the sports. The children thought they were playing, and did not realize that they were going through an athletic drill planned especially for their physical and mental development. At that moment, too, some fifty thousand other children were engaging in similar exercises.

These school playground exercises are the foundation of the interest in athletics that Americans have inculcated among the Filipinos. Selected teams of boys and girls trained in the schools come from all over the archipelago to take part in the games held every year during the Manila Carnival. Some of those acquitting themselves best here are sent to compete in the great athletic event of this part of the world, the Far Eastern Olympics. In these the youth of China, Japan, and the Philippines are contestants, and the Filipinos have shown up wonderfully well.

We have made baseball the national game of the Philippines. Moreover, the girls play almost as much as do their brothers, though they use the larger ball and smaller bat of so-called "indoor" baseball. A feature of the Manila Carnival is a tournament among the girls' teams, in which there have sometimes been so many entrants that it has taken a week to play off all the matches and determine the winners. The most famous of all the girl nines was that from the public schools of Tipas, in the province of Rizal. They were called the "Tipas Tots,"

and back in 1912 they won the southern Tagalog championship, which they held for five years running. More than once they were the victors in the Manila Carnival contests. One year the invincible "Tipas Tots" went to China for an Olympic, and gave an exhibition that added glory to their record and, I doubt not, greatly astounded the small-footed Chinese women looking on. As these girls grew up and left school to become teachers, wives, or business women, their team scattered, but a few years ago they reassembled and again won a series of victories.

At the top of the whole system of primary, secondary, technical, and normal schools in the Islands is the University of the Philippines founded in 1908. This is the pride of the Filipinos. It is coeducational and has an enrolment of about five thousand students. There are seven colleges, those of liberal arts, medicine, and surgery, veterinary science, engineering, law, agriculture, and education. It has, in addition, schools of dentistry, pharmacy, fine arts, forestry, and music. The University occupies altogether thirty-one permanent buildings in the city.

There are altogether in Manila something like twenty thousand students attending the universities, colleges, academies, and other higher schools. In many cases these young men and women are poor, and formerly numbers of those from the provinces were herded together in miserable shacks where they had the meanest of food and accommodations. To remedy such conditions among the students, some of the missions have built dormitories, which have proved a great success.

In Spanish times a few of the wealthiest planters sent

their sons to study in Europe. To-day the government grants scholarships to particularly promising young Filipinos to study in the United States. Many of these *pensionados*, as they are called, have made fine records in the States and have returned to take leading parts in the affairs of the Islands. Isaac Barza, the National Students' Secretary at Manila, has kept records of Filipino boys and girls who have studied in America and who now hold important positions at home. His list already includes six hundred names. Among them are those of graduates of Yale, Columbia, the universities of Indiana and Illinois, and others of our leading collegiate institutions.

CHAPTER VII

TOBACCO FIELDS AND FACTORIES

ALL Manila smokes. The men smoke like chimneys day in and day out, the boys begin to puff before they can talk, and girls of eight, ten, and twelve pout for their daily tobacco.

As I look out of my window I notice some country girls rattling by in a cart. They are smoking cigars! The boys smoke on their way to school, and there is a child playing marbles with a cigarette tucked behind each ear. The Filipinos light cigarettes between courses at meals; your hostess offers you a smoke as soon as you enter her home. The priests smoke on the streets, the ladies smoke in their parlours, and there is not a government office in which the clerks, both native and American, do not smoke while at work. It is the same in the banks, in the stores, and, in fact, everywhere.

Besides growing enough leaf to keep the Filipinos supplied, the Islands export six or seven million dollars' worth of tobacco products annually. These include about two hundred million cigars. In Manila there are factories employing thousands of workers who are said to be the most expert cigarmakers of the world. The cigars are rolled by hand, and the best of the workers are girls, who use their long, slender fingers with a speed and skill that our own cigar rollers lack.

Let us visit one of the large cigar factories. The one

we choose is a three-story building covering three or four acres. It has many big rooms, some of which are three hundred feet long. These rooms are filled with workers, for the factory employs three thousand people, most of them girls or women.

As we enter the building and walk up the stairs, the rich smell of the tobacco floats down. Passing through a wide door, we find ourselves in the midst of an acre of women. There are about a thousand of them, all dressed in white, and their dark faces are in sharp contrast with the snowy kerchiefs around their shoulders. Here and there a kerchief has been discarded on account of the heat, leaving a plump neck exposed, or a dress has slipped down, and a smooth shoulder is showing. All are barefooted. They are working at long tables not quite a foot high. Some are sitting on stools, but most squat on the floor with their legs bent under them. Others sit so that their knees rise above the tables, in what seems to us a most uncomfortable position.

They work rapidly. Notice this pretty maid at the right. Picking up a leaf of tobacco from the pile before her, she spreads it out upon the table and pounds it with a stone to make it lie flat. To this leaf she adds another, then another, and so on until she has enough for a long black cigar. Then she rolls this rapidly around in her delicate fingers, puts on the wrapper, and, finally, placing it between her pearly white teeth, she bites off its end, kissing the cigar, as it were, before she lays it away. That should be a smoke for a king.

You must not think, however, that all of the cigar-makers are beautiful nor that all have sweet lips or pearly white teeth. Among them we see many gray-haired old women,

with fangs as black as the tobacco they bite, and some, we shudder to notice, chew the betel at intervals during their work. Most of the cigar-makers are paid according to the number they roll. The best women earn as much as five dollars a week, though the average girl does very well if she can make forty or fifty cents a day.

For many years before we occupied the Philippines, their tobacco had been known in parts of the United States. In the old days, when New England's clipper tea ships were the fastest on any seas, they used to stop at Manila for hemp and take on small cargoes of cigars for the wealthy merchants of Salem and Bedford. In the time of the California gold fever Manila cigars won favour among the new-rich miners of San Francisco, where they have been popular ever since.

The Philippine cigars are of several different grades, ranging from light brown to almost black. The tobacco is not so heavy as our American leaf, contains less nicotine, and is said to be less stimulating. "It compares with ours," an old American smoker tells me, "as beer does with whisky."

Yet the American market for Manila cigars has grown enormously in the past two decades. In 1907, for example, the Philippines sent us only eighty-two thousand cigars, while nowadays, as I have said, we take two hundred million and more in a year. Every box of Manila cigars and every bale of leaf tobacco that leaves the Islands carries the government guarantee that it is up to standard. Cigars must be packed in clean, new boxes of a native wood known as *calantas*, or of imported cedar.

Philippine cigarettes are made of tobacco so dark that it is almost black, unmixed with sweetening or flavouring

extracts, and most of them are consumed in the Islands. They are of the same size and shape as ours, except that only one end of the cigarette is open, the white paper at the other end being turned in. It is the closed end that is lighted.

The best Philippine tobacco comes from Luzon, the choicest being grown in the Cagayan Valley in the northeastern end of the island. Through it flows the Cagayan River, which is navigable for small boats for many miles from its mouth. The valley runs north and south for more than one hundred miles and is from five to twenty miles wide. When the river is in flood it brings down rich silt from the mountains which fertilizes the land as does the Nile in Egypt, and gives it a soil that can be used for tobacco culture year after year. One tract of land in this section is known to have been planted to tobacco for more than one hundred and thirty-five years consecutively without an ounce of fertilizer ever being used on it.

There are four large provinces in this region, in which little else besides tobacco and Indian corn is grown. In addition to this territory there is a strip of land in northwestern Luzon which has many plantations. The tobacco there is not so good nor is it raised in such quantities as in the Cagayan Valley. There are also small plantations in the other islands of the archipelago, but about the only tobacco exported is grown in Luzon.

One of the Manila tobacco companies has a big plantation employing several thousand workers, but the average tobacco farm of the Philippines consists of only a few acres, producing three or four bales of leaf a year. It is estimated that nine tenths of the tobacco grown in the Cagayan Valley is raised on more than twenty thousand

small plots, each averaging an acre. The seed is first sown in beds, just as in the United States. After the plants are eight or ten inches high they are set out, sometimes so close together as to number several thousand tobacco plants to one acre.

In northeastern Luzon the planting is done in the late fall. As the tobacco matures, women and girls pick off the big green worms that feed on it. The crop ripens in the dry months from January to March, and by May the harvest of the first and best leaves is over. Generally the leaves only are gathered and the stalks are left standing until about midsummer, when the second crop is gathered for home use. Often the leaves are first cured in the sun and then moved into the shade beneath the planter's house or in a shed. It is considered better, however, for the drying to be altogether under cover.

After they have been dried sufficiently the leaves are laid to ferment. If the tobacco is properly fermented the desirable qualities in flavour and aroma are fixed. The leaves are then sorted by colour into bundles of one hundred each, and tied with strings of rattan. Forty such bundles, or four thousand leaves, just make a bale. The bales are wrapped in mats of banana leaves, tied with rattan, and sent to the market, whence they go by steamer to Manila. The chief tobacco port of Luzon is Aparri, at the mouth of the Cagayan River.

There are three important outlets for Philippine tobacco: the enormous domestic consumption of cigars and cigarettes, a market in the United States for cigars of the best grade of tobacco that the Islands can produce, and a big demand in Europe, particularly in France and Spain, for low-grade leaf. There is also a smaller, though steady,

Besides being a star baseball player, this native youth is a sprinter, holding the Philippine record for the 100-yard dash, which he made in nine and four fifths seconds.

Philippine cigarettes are made of tobacco so dark that it is almost black, unmixed with sweetening or flavouring extracts, and most of them are consumed in the Islands. Manila cigars, on the other hand, are increasingly popular in the United States.

sale for Philippine tobacco products in China, Japan, and India, where Manila cigars are much esteemed by the wealthier natives. The chief problem of the Filipino grower is to improve his product to meet the requirements and command the good prices of the American market.

From planting to harvest the Philippine tobacco crop is supervised by the Bureau of Agriculture. Its agents are authorized by law to buy and clean seed and distribute it free among the planters. It is unlawful for any planter to cure leaf tobacco except in a building or curing shed constructed in accordance with the specifications of the Bureau. The Bureau makes slow progress with its efforts, because, for one thing, there are such numbers of small growers, many of whom are quite ignorant and unwilling to give up the old ways. Another trouble lies in the system of buying that obtains in certain of the tobacco regions. Here many of the buyers purchase all grades of tobacco for a flat price, regardless of differences in quality. Why, then, ask the growers, should they take the trouble to better their product? Even when the planters are able to sell by quality, the buyers often grade the leaf as low as possible, reclassifying it higher when they come to sell.

So year after year fields are poorly tilled, transplanting is too long delayed, and worms are allowed to feed on the leaves. It is estimated that in the Cagayan Valley poor cultivation reduces the total crop by fifty per cent. Only about one third of it is harvested at the proper time, the rest being gathered too green or too ripe. I have seen it stated that the methods of curing the leaf practised in this region have been the worst that ever existed in any tobacco-producing country of the world. Nevertheless, the Cagayan leaf continues to be of excellent quality,

largely because the soil is so fertile and so well-adapted to tobacco that in spite of themselves, as it were, the growers keep on raising a fine product.

For a good part of the Spanish régime much better methods were in use in the Philippines than those employed to-day. Tobacco seeds were brought into the Islands from Mexico by the priests and for some years after the Spanish flag had been planted in the new colony, the government paid little attention to the possibilities of tobacco. But in 1781, while we were fighting England over such matters as taxes on tea and stamps, the Spanish declared a state monopoly in the cultivation and sale of tobacco, which remained in effect until 1882. As soon as the monopoly had been decreed the authorities set to work to see that the crop raised should be of maximum quantity and quality. Spanish experts were sent to the famous Vuelta de Abajo district in Cuba to study methods. They returned, bringing seeds that were landed at Vera Cruz, taken muleback to Acapulco on the western coast of Mexico, and there loaded on the annual ship to Manila. The trip took two hundred and eight-seven days, or long enough to go several times around the globe nowadays. On one occasion a whole shipload of Spanish cigar-makers were sent out to Manila.

The farmers of the Cagayan Valley were compelled to plant tobacco on penalty of losing their holdings. Every family had to set out four thousand plants a year, and any land that was not in tobacco for three years in succession was liable to pass out of the hands of the man who lived upon it.

The government regulated just how the tobacco should be raised and cured. It prohibited the planters from sell-

ing to any one except its officials, and fixed its own prices, which in 1882, the year the monopoly was abolished, were fifty per cent. less than in the year after. The planter could not even smoke his own product, except in certain places and at certain times. His house was subject to search for concealed leaves. On such pretexts officials sometimes even examined the person of the grower's wife or daughter. These insults occasionally cost the revenue officers their lives.

The government had five large factories in which twenty thousand men and women were employed, and made a profit of about five million dollars a year in the tobacco business. Finally the treasury began to pay the planters in notes instead of cash. These sold for only fifty cents on the dollar, so that much misery followed. At length there was so much opposition that the monopoly was abolished.

CHAPTER VIII

THROUGH NORTHERN LUZON BY RAIL

FOR hours I have been riding on a train through one of the richest valleys of Luzon. On each side of it are volcanic mountains, rising and falling in rugged beauty, and between these blue walls is a fair land of silver-gray patches, sewed together with wide strips of green and embroidered with flowers.

As I look out of the car window I see a vast network of rice fields mounting in gentle terraces, one above the other. Every few miles we pass a village, its thatched huts peeping out of clumps of bananas. There are carabaos and ponies grazing in the fields, and gangs of men and women working the crops. Here and there is a little patch of green corn and now and then the train runs through a few acres of sugar cane. I can look over miles of level fields now gray after the rice harvest, or green where the vegetation is sprouting between the cut stalks. Here the valley is like a great floor; in other parts the land has a gentle slope; while in some places the farms rise in a series of shelves.

Near the railroad the land is not irrigated. The plots are small and unfenced, but each is surrounded by low grass-grown embankments to keep in the water that falls in the rainy season, when it pours for days and days at a time. In sections of the valley the rainfall is sometimes so heavy that if all the water that drops on one acre could

The best Philippine tobacco is produced in the fertile Cagayan Valley of Luzon. Nine tenths of the tobacco grown in the valley is raised on more than twenty thousand small farms averaging one acre each.

If the rice growers of the Philippines got as high a yield as the average in the United States the Islands would rank third among rice-exporting countries. As it is, the Filipinos import twenty-five per cent. of their rice.

There are in the Philippines some mechanical rice threshers, owned by groups of landholders and routed through the country from farm to farm; but for the most part the old methods prevail.

be held there it would reach to the head of a Filipino standing upon the shoulders of his tallest brother. But we are on the verge of the hot season now, so that everything is comparatively dry.

The earth walls that hold in the water are about eight inches thick and perhaps a foot high. They form a network of squares, making the country look as though it were the moulding field of an iron foundry. The squares vary in area from the size of the average city lot to an acre. Flowers as well as grass grow on the embankments, some of which have pathways worn along the tops by the bare feet of the farmers.

The country we are passing through is dotted with groves and clumps of bamboos, their round stalks as high as a six-story building; they line most of the highways. Their lean branches, adorned with feathery green, quiver in every passing breeze. Out in the fields the few houses are almost hidden by the bamboos or bananas that shade them. The people here live mostly in villages, which are stretched along both sides of the roads, sometimes for a mile or more, just as in France and Germany, and many of the farmers walk several miles to their work every day.

The farmers I see are even more picturesque than their surroundings. There are hundreds of brown-skinned women, most of them dressed in bright reds. Brown hats that look like big bread bowls turned upside down protect their heads from the blazing sun. Their short jackets seem always just about to fall from their shoulders, while their bag-like skirts are often tucked up so that the bare feet and half of the legs show. The men wear their shirts outside their thin cotton trousers, and most of them have on big hats like the women. There are also children

of all ages, some dressed like their parents and others wearing almost no clothes whatever.

Now compare the country about with a farm scene in the United States. There is practically nothing to be seen on the landscape save vegetation and people. There are no farmhouses or great barns standing out in the fields. The straw stacks are small. We look in vain for cows, sheep, or horses. The only animals visible are the carabaos, or water-buffaloes, with here and there a black razor-back hog. We are never out of sight of carabaos. They graze by the roadside, they wallow in every pond and mud puddle, they pull great carts with wheels a yard in diameter, or drag rude sledges through rice fields where the wet ground is so soft that wheeled vehicles cannot be used. As I write I can see them going along, their heads down, dragging crude single-handled ploughs.

After work, the men usually ride their carabaos from the fields to their homes, and I often see one in a pasture with a brown-skinned boy or girl perched on its great flat back. Wherever they are grazing they are ridden by the birds. We have just passed a carabao with a white crane roosting on it, and farther on is one with a crow sitting close to its tail. The bird is pecking at his mount, but the buffalo does not object since he knows that the crow is a good fly catcher and is feeding on the insects that are feeding on him. Sometimes a carabao is followed by a small troop of white herons, which eat the worms exposed in the mud in the big beast's footprints.

The carabaos are the draft and farm animals of the Philippines. They are as big as the average Durham cow, but no respectable American cow would acknowledge the relationship. At six years of age, they are usually ready

for use, and if they are well-pastured and bathed they will continue to do heavy work until they are twelve, and light work for another five years or more. The carabao is well named a water buffalo. I have seen it stated that, left to itself, it will spend at least a third of its life in water or mud. When it is grazing near flooded land it will walk into the water up to its neck and even keep its head under for more than a minute at a time while it searches about for vegetable food beneath the surface. I have been told that the animals have but few pores in their thick black hides, and that in hot weather unless these are kept active by a bath several times a day, the beasts will go mad. A half hour in the water after every four hours of hard work is said to be the rule. I have watched the drivers of carabao carts in Manila stop now and then at the river or the canals, and let the beasts wade in until their backs were awash and only their heads showed above the surface. In a short walk I have counted a score of carabaos bathing in this way.

The prices of carabaos vary with different sections. In the Spanish days an ordinary animal would average about seven dollars and a half, while a first-rate one might be had for five dollars more. The best stocks nowadays bring from seventy-five to a hundred dollars a head. The water-buffalo is too valuable as a work animal to be much used for meat, but the cows are generally milked.

In this part of the Philippines most of the rice was harvested some weeks ago. The heads were snipped off one by one, tied up in bundles not much bigger than a good-sized bouquet, and carried home to be threshed. The people are now going through the fields cutting the straw, tying it into bundles, and putting them in low windrows

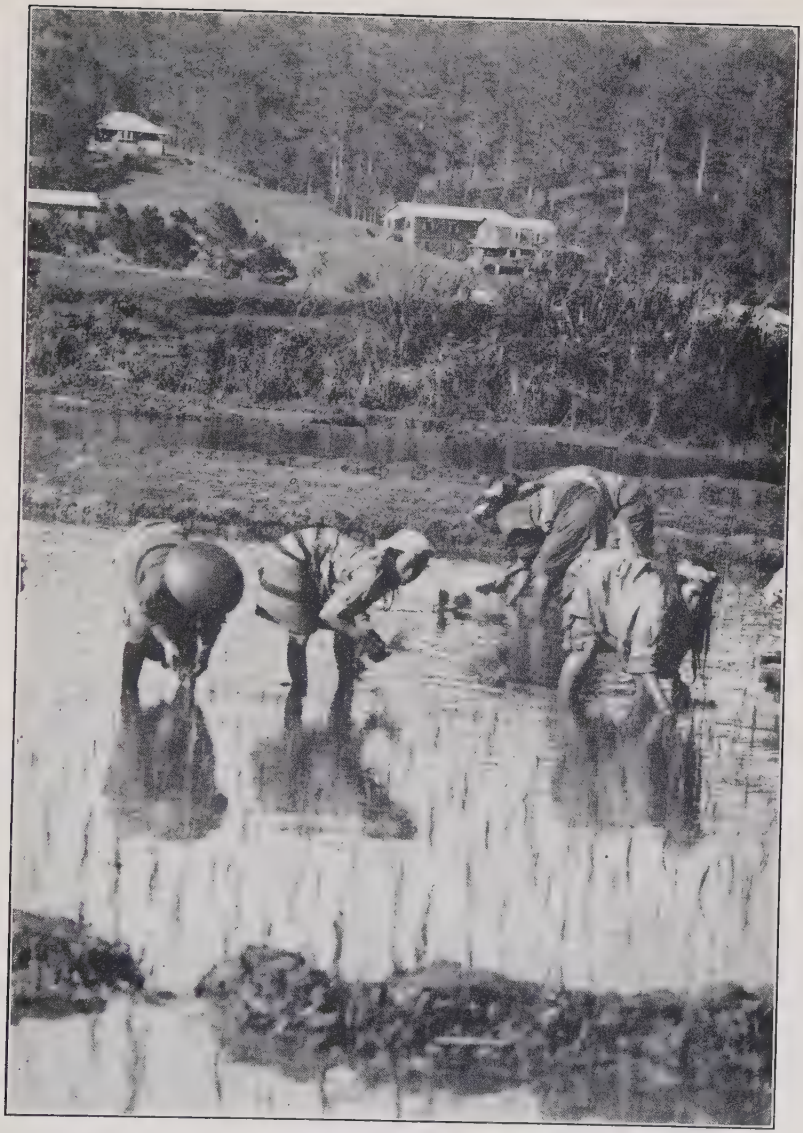
and piles. Each worker has a sickle or knife, and must bend low to cut the stalks. Some of the girls are so pretty that they bring to my mind the picture of Ruth, the grandmother of David, as she gleaned the barley from the fields of her rich cousin Boaz before she had won his heart.

Here and there we see a little stack of rice straw in a field, and now and then pass a tract of wild land where the rank vegetation gives a hint of the wonderful fertility of the soil. I have ridden on horseback through such tracts and found the grass as high as my head as I sat in the saddle, and I have stood in the midst of it and seen the tops wave in the breeze six feet above my straw hat.

There, on the left side of the railway, are two men and four women holding on to a bamboo rail suspended between stakes driven into the ground and jumping up and down on the rice straw under their feet. That is the human threshing machine of Luzon, treading out the rice. On some farms ponies and carabaos driven 'round and 'round over the straw get out the grain. There are also in the Islands some mechanical threshers which are often owned by companies of local landholders. They route them through the country and generally charge one tenth of the amount threshed. The winnowing is done by the wind, the rice being thrown up into the air again and again and the grains caught in a tray.

The last process is hulling the rice grains, that is, removing the outer coat that sticks close to the kernel. For domestic consumption the rice is generally hulled as needed. The usual method is to pound it with a great wooden pestle in a mortar made of a hollowed log.

That reminds me of an incident during the Filipino



The Filipinos are sometimes said to be lazy. It is hard to believe they are, after seeing the rice planters working for hours in the blazing sun at the back-breaking task of setting out the shoots one by one in the mud.

The Filipinos remove the outer coating of the rice kernel by pounding the grain in crude wooden mortars. After threshing, the farmers store their rice in rat-proof granaries and hull it as needed.

insurrection that created excitement in General Joe Wheeler's brigade. When I was at Wheeler's headquarters up here in Luzon the *insurrectos* were close by. One day an officer rushed in to report the sound of firing near by, saying that the Filipinos must be attacking. We went out and listened and decided that the engagement was about two miles away. The shots came boom! boom! boom! boomety boom! The little General's face brightened, for, as you know, he dearly loved a fight. He said:

"It sounds to me as if they are firing on our men at Bacolor. We had best go to the lookout; they may need our help."

The lookout was a small tree near the headquarters, where a man with field glasses was stationed to scan the country and guard against surprises. Upon being asked whether he saw anything, he said there were no troops in sight, but he was sure the firing was within less than two miles. He gave the direction, and the General and his staff started off with some troops to attack the guerillas. After a quick march, they found the source of the alarm—a half-dozen farmers pounding out rice with log pestles and mortars. That was all. The incident was afterward known in Wheeler's brigade as "The Battle of the Rice Pounders."

My first ride in the Islands was over this same railroad on which I am travelling to-day. Guerilla warfare was then going on from the northern tip of Luzon to southernmost Mindanao, and we had soldiers on every island. One of the first men I met in the Hotel Oriente in Manila was "Fighting Joe" Wheeler, who had made a great reputation as a cavalry leader in our Civil War; and then, thirty-five years later, at the age of sixty-three, he was as spry

and active as a Filipino game cock. He asked me to come up to his headquarters about eighty miles north of Manila on this line.

In response to my query as to whether he could accommodate me at the camp, General Wheeler said: "Of course! I have a whole palace; it is floored with mahogany and there is plenty of room." He told the truth, but when I got up there I found the palace was as bare as a barn. The mahogany floors upon which I had to sleep were so hard that the wood would turn a nail, and I discovered fifty-four new bones in my body during the first night of my stay.

On that trip there were soldiers on the engine and at the ends of each car. We were fired at several times on the way, and a bullet went through the window of the compartment next to the one in which we were sitting. What changes since then! The guerillas disappeared from the Philippines more than two decades ago, and one can now travel over all parts of these Islands and be quite as safe as anywhere in New England. At this moment I sit in a comfortable compartment, big enough to hold me and my secretary, as well as our eight pieces of baggage. Instead of a soldier taking the tickets, there is a dapper Filipino dressed in khaki. The road-bed is comparatively good, and the cars, which are almost all windows, are like those of Europe. I am travelling first class, and the fare is as high as at home. There are third-class cars in the rear, filled for the most part with Filipinos.

Our only discomfort comes from the dust which has been blowing in nearly all the way. The conductor, not much bigger than a minute, but quite a giant in dignity, comes in now and then to dust the seats, but he scarcely

leaves the compartment before the sand settles thick again. It clogs the keys of the typewriter as my secretary takes my notes. As for him, he is a sight, which is likewise, I suspect, the case with myself, only he is too polite to say so.

At the time we took possession of the Philippines, this line, known as the Manila Railroad, was the only railway in the Islands. It was then one hundred and twenty miles long and had been in operation but eight years. It had been built by a British company, but it was not very successful. For some years after our occupation the Philippine government continued to advance the money for new construction and to pay each year a substantial sum to cover the deficit on the interest on the railroad bonds, which it had guaranteed. Under the British management a public scandal arose through the practices of the right-of-way department. Its members bought land from the natives at nominal rates and then sold it to the company for exorbitant prices. It was calculated that four hundred and fifty million dollars had been spent in this way—all represented by bonds on which the Philippine government had guaranteed four per cent. interest. The ringleaders in the gigantic steal were a Filipino and two Spaniards. The Filipino was tried and sentenced for his part in the transaction, but the Spaniards escaped to Spain, whence they could not be extradited.

The British company either could not or would not clean house, so at last, in 1915, the government bought the road for four million dollars. The property was in such poor condition that for the first three years of state management profits had to be turned back to repair roadbed, buildings, and rolling-stock. Since 1918 the company

has been operated by a new corporation of which the government is the sole stockholder. The stock is voted by a board consisting of the Governor-General and the presidents of the two houses of the Legislature, both of whom are Filipinos. The board of directors also has a majority of Filipinos. The system, which now has some six hundred and twenty miles of track, is operating at a profit. Arrangements have been made whereby most of the mileage of Cebu and Panay, the only other islands having any railroads, will eventually come under government control.

Luzon has most of the railroad mileage in the Islands. In Cebu there are some sixty miles and in Panay seventy-two miles. It is estimated that one fourth of the people of the archipelago are reached by railroads. Nearly every one of the larger islands would be benefited by more transportation facilities, and I should think that most of them are thickly enough populated to make new lines practicable.

Of course one reason that there are not more railroads in the Philippines is the fact that the great majority of the people live not far from the sea, so that much freight is carried on the steamers moving about in the waters of the archipelago. More than four hundred inter-island vessels are now operated in the coastwise trade.

As to the highways, the Islands already have a mileage of public roads long enough to reach from New York to San Francisco and back, and sufficient first-class motor roads to extend from Boston to Salt Lake City. The first-class roads are well graded and surfaced and kept in good repair. They have many concrete bridges and culverts, and where no bridges have been built, there are ferries that can carry automobiles weighing two tons and

more. Motor trucks are now doing much to make up for the lack of railroads.

But our train has stopped at a station. The crowd is pouring in and out of the third-class coaches, and peddlers have flocked to the car windows. They are mostly women carrying their wares in baskets. Here is a girl with a wooden bowl as big as a parasol turned upside down balanced on her head. It is filled with ripe yellow mangoes, the odour of which makes my mouth water. Behind is a boy with his arms full of sugar cane, peeled and ready for sucking, and at the next car window is a woman with mosquito-net sleeves, who offers the passengers cooked fish wrapped in banana leaves. Others are selling candies and cakes, and one has a basket filled with duck eggs. I recognize them as *balut*, or the half-hatched ducklings cooked in the shell that I saw in the Manila market.

The crowd moves back and forth. It is quiet and orderly, and there is less bustle than at our railroad stations at home. The piles of freight being taken off and put on give me an idea of the traffic on Luzon. Directly opposite my car window are ten two-bushel baskets filled with ripe red tomatoes, and beside them are stacks of rice bags ready for loading. In front of the tomatoes is a woman with an airy waist and a red calico skirt that just touches her bare feet. She has three gold rings on her fingers and gold rings in her ears. Nearly everyone wears slippers without heels, but not a few are barefooted.

As we go on we have a look at the villages. The school buildings stand out quite conspicuously. Many of them are better than one would see in towns of the same size in the States. They are large, well-lighted, and as clean

as new pins. Now and then we see the children romping on their playgrounds.

Every town of any size has also a plaza faced by a church, the municipal building, and some of the best dwellings. On the other streets, surrounding the plaza and often extending miles along the roads out into the country, are thatched huts. These are usually built with a framework of bamboo poles, walls of split cane woven like a basket, and roofs of grass or nipa palm leaves. The dwellings are generally from three to six feet above the ground so that the floors may be clear of the water during the rainy season. In the farmhouses the first floor is so high that the owner's carabaos and other live stock can stand under the house in the heat of the day. The same space often forms a shelter for the farming tools and carts.

The village houses of the better class are large and commodious. They may have a first story of stone and a second of wood, and they are often surrounded by beautiful gardens. Indeed, a number of them have all the comforts of an American home. Some of the towns are now lighted by electricity, but most of the villages have only oil lamps.

Leaving Dagupan, a straggling town with two score cheap automobiles and a number of carabao carts at the station, we strike out into a low country cut by waterways and divided into great fields with thick walls of mud as high as your waist. Some of the fields are dotted with little palms and soon after this we come into a coconut country and ride for miles in sight of ragged, drunken-looking trees which lean this way and that as the winds have blown and twisted them about.

The smell of the sea floats in through the car windows;

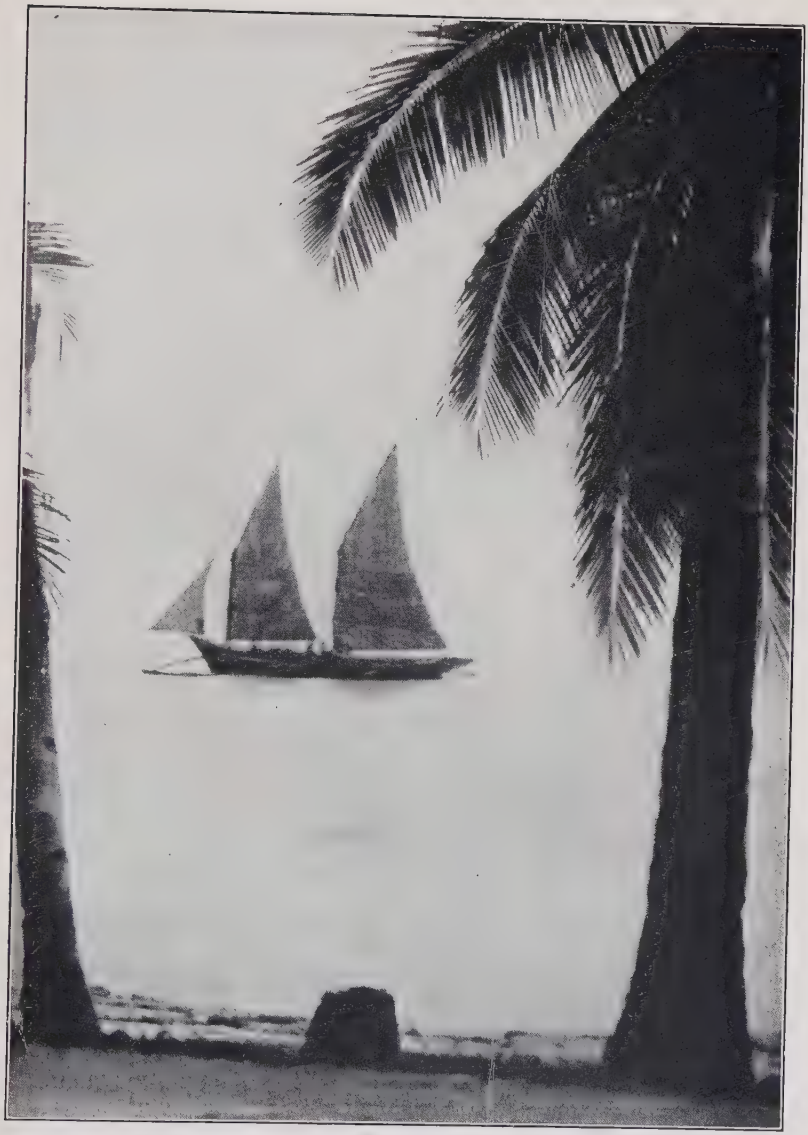
for we are now near the coast of the Lingayen Gulf. We pass through villages of palm-thatched huts on high stilts surrounded by coconut and banana groves. Now and then we cross a stream or an arm of the sea. Away at the right tall smoky mountains look out of the clouds. Now we are coming to the village of Damortis and the end of our journey by train. Unless there has been some slip in our plans, the motor I ordered from Manila is waiting for us at the station to take us up over the Benguet Road to Baguio, the famous mountain resort of the Philippines.

CHAPTER IX

BAGUIO

IMAGINE that you have stepped into an airplane in the city of Washington, shoot up to ten times the height of the Washington Monument, turn the machine so that it faces the sun at its setting, and guide it into the west. You can easily make a speed of one hundred miles an hour, so that within four days you will strike the exact place where I am writing. It is Baguio, on top of the mountains of northern Luzon, and one of the most beautiful spots on the globe. My altitude is just about one mile above the level of the sea. The climb from Manila has conquered the heat of this equatorial land and transported me from the tropical to the temperate zone. In Manila I sweltered at night under a mosquito net cover; here I am chilled with anything less than a blanket. In Manila the air seemed as flat as stale beer. In Baguio every breath is filled with champagne, and so invigorating that new blood seems to flow through my veins.

I learned from the late Dean C. Worcester, who was so long identified with the Islands, the story of the discovery of this Switzerland of the Philippines. The tale goes back to the days of Spanish rule, when young Worcester was camping in the island of Mindoro in search of zoölogical specimens. He was visited by some Spanish officers, one of whom, attached to the forestry bureau, told him that



"The smell of the sea floats in through the car windows, for we are now near the palm-fringed shore of the Lingayen Gulf."

In the moist heat and tropical vegetation of Manila it is hard to realize that only eight hours away is Baguio, high up in pine-clad hills and blessed with a cool, invigorating climate. It is the Simla of the Philippines.

in the highlands of Luzon, at an elevation of about five thousand feet, there was a region of pines that had a perpetually temperate climate and sometimes was even visited with frosts. The professor could scarcely credit the story; for he was an experienced climber of Philippine mountains and at the elevation mentioned had always found a hopeless tangle of tropical vegetation, the trees draped in moss and orchids and dripping with jungle moisture. And yet, somehow, the Spaniard's description recurred to him again and again, a sort of vision of paradise as he suffered in the steamy lowlands.

It was years later that Worcester, as a member of the Philippine Commission, got a chance to investigate the truth of the Spaniard's assertion. He led a party of Americans through heat and dense vegetation that seemed to give the lie to his hopes, until all at once, within the space of a hundred yards the party left the tropics and their jungles and found themselves in a region of pines scattered over rounded knolls carpeted with short, thick grass. At sunset that evening they came out on a sharp ridge and looked down into what is now known as the Trinidad Valley. Its floor was vivid with the emerald green of growing rice, and dotted here and there were the huts of Igorots. That night the most sceptical of the party, buried under a pile of blankets, acknowledged that Worcester's faith had been justified. A bit later on, Worcester came up here to recuperate and found the place did such wonders for him that when William Howard Taft fell ill some months afterward he urged that instead of returning to the States, the Governor give the breezes of the Benguet Mountains a chance to restore him to health.

Taft was then fair, fat, and not much over forty,

but the hot sun of Manila had laid him low, and he had cabled Elihu Root, who was Secretary of War, asking to be allowed to come home. But the cabled reply stated that it seemed necessary for the good of the Islands for him to stay on his job and advised him to take a vacation in the best climate near by and see if he could not regain his health. So he gave ear to Worcester, and in the hot month of April he and his party took a ship, steamed north, and landed on the shores of the Gulf of Lingayen. Here he got an outfit, and rode over the winding trail through the jungle to this place in the mountains. When at last Taft eased his three hundred pounds into a chair on the veranda of the shack that was to be his home for some months to come, he was so delighted with the prospect that he dictated the following cable:

April 15, 1903.

SECWAR,
Washington

Stood trip well, rode horseback 25 miles to 5,000 feet altitude. Hope amoebic dysentery cured. Great province this, only 150 miles from Manila with air as bracing as Adirondacks or Murray Bay. Only pines and grasslands. Temperature this hottest month in the Philippines in my cottage porch at three in the afternoon 68. Fires are necessary night and morning.

TAFT.

Next day over the wires under the wide Pacific Ocean came the reply:

TAFT,
Manila

Referring to telegram from your office of 15th inst., how is horse?

ROOT.

At that time there was not much talk of immediate independence for the Philippines, and it seemed as if we

should have to hold the Islands for many years before the natives would be prepared to govern themselves. It was thought necessary to have some place where the American officials could go for several months of the year to keep in good health. The subject was carefully canvassed by the authorities at Washington and Manila, and on the advice of Taft it was decided to build at Baguio a summer capital, somewhat like that of the British at Simla in the Himalaya Mountains.

An essential feature of the project was the building of a modern highway from the sea up to the mountain tops. The result was the Benguet Road, over which I came to Baguio by motor. I am not a high official and I have no government vessel at my disposal. Moreover, cables are too costly for me to telegraph the Secretary of War as to my health. I learned at Manila that I could come all the way here by automobile, or take the railway to Damortis, and have a car from Baguio meet me there. The charge for the motor trip from Manila was eighty dollars, or ten dollars an hour for an eight-hour journey. As the railway trip with motor from Damortis to Baguio would cost less than one third of that sum and would take only about an hour longer, I chose the latter, and it was not at all bad. As we drove up the mountains I congratulated myself on my car, thinking betimes how unfair it was that Taft should have entrusted his one seventh of a ton to the back of a horse, while skinny I, who tilt the beam at one hundred and ten, should rest my lean bones on comfortable cushions.

Even in Massachusetts there is no better highway than the Benguet Road. It is macadamized from one end to the other, and is kept in perfect condition. As

we went along we saw half-naked Igorot men and women dragging stones from the cliffs and with rude hammers of steel breaking them inside iron hoops into bits the size of a walnut. Most of the men wore only a shirt and a gee string. I made a snapshot of one—a man as brown as a berry, who that day, at least, had left his shirt at home. The workers are paid by the cubic meter of crushed rock, receiving ninety cents in our money for pounding to bits a pile of stones heavier than two horses could haul on our country roads. The stones are afterward crushed fine by machinery and steam rollers so that the road is smoothly surfaced throughout.

Here and there labourers were repairing the walls that safeguard motor traffic over this scenic highway. In the heart of the mountains the road is often so narrow that two cars cannot pass, and as they dash around the curves a skid might drop them into the rocky canyon below. At such places walls a foot wide and half as high as your knee have been built, and altogether there are many miles of them. We passed over long wooden bridges just wide enough for the car, and stopped again and again at the frequent gates to wait for the automobiles coming down so that they might pass us at these wider places. At each of the stations stood a Filipino section guard who controlled the traffic by telephone, thus preventing accidents.

The road is cut right out of the cliffs, and at times it seems to cling to the rock halfway between the mountain tops and the rushing river in the canyon below. It follows the course of the Bued, a stream more winding than the Jordan. The river is six hundred miles long, though the airplane distance from source to mouth is but two hundred miles. The road twisted and curved like a corkscrew, much

The Benguet Road from the sea up the mountains to Baguio is a triumph of engineering skill and highway maintenance. Though it is only thirty miles long, it had cost, when finally opened to traffic, nearly two million dollars.

Shirt-tailed caddies are no novelty on the eighteen-hole golf course at Baguio, where Igorot boys carry the clubs of the officials, army officers, teachers, and others who come up for a rest in the highlands.

of the time we went in low gear and often the grade seemed as steep as the slope of a barn roof.

The ragged hills were covered with green. At times they rose straight into the fleecy white masses of clouds resting on their sides, and there was no level land anywhere. The torrential rains had cut great gashes in the mountains, so that their sides looked as though they had been ploughed by a race of Titans. Part of our way was through a narrow winding canyon, shut in by towering cliffs. In one place a waterfall, like a bridal veil, draped a precipice several hundred feet high. The wet black rock gleamed through the glistening white spray. Farther on, the canyon was filled with boulders that reminded me of the gigantic stones guarding the grave of Cecil Rhodes in the Matopo Hills of Rhodesia.

We frequently passed villages, and in nests of the hills saw Igorot *barrios*, little groups of huts from twelve to twenty feet square with thatched roofs. There were many Igorot porters on the road, barelegged men clad only in shirts, and women in tight jackets and striped calico skirts almost to their knees. The women carried loads in big baskets balanced on their heads or held on their backs by ropes about their foreheads. We met also Americans and Filipinos in motors. At Hot Springs, about halfway up, a pretty bare-armed American girl was watering a lawn, and at the next gate we waited for a limousine carrying four bareheaded Filipino ladies.

In twenty miles of riding through scenes like these we rose from two hundred to three hundred feet to the mile. We passed Zigzag Gate, went into second gear on one last ascent, and then coasted along on the roof of the mountains to Baguio.

Though the Benguet Road is less than thirty miles long, it had cost, when finally opened for traffic, close to two million dollars. Thereby hangs a tale of difficulties and quarrels, for many Filipinos opposed its building and have had a great deal to say about the tremendous outlay upon its construction and upkeep. Some of them still regard it as only a highway to a playground for Americans and others of the official and wealthy classes. The army engineer who first undertook the project of making a road up the valley of the Bued to Baguio asked for seventy-five thousand dollars. He said he thought the work could be done for ten thousand under that sum, but he wanted a safe margin. That did not seem a formidable amount, so the Philippine Commission, which was then in charge of affairs in the Islands, authorized construction. Two years later the money was all gone, the road was far from finished, and experts assured the government that it would take a million dollars to put it through.

Still, the importance of having a health resort such as Baguio accessible from Manila and the lowlands seemed so great that it was determined to go ahead, and the road was opened for regular service in March, 1905. Large expenditures were not at an end, however, for maintenance has levied heavy toll. In one year, for example, in a terrific typhoon eighteen inches of rain fell in nine hours, the Bued River rose fifty feet, carrying down trees, rocks, and bridges in its rushing waters, and washing away much of the roadbed.

About eighteen months after the highway had, by strenuous effort, been opened once more, another storm swept northern Luzon. The heavens opened, and in twenty-four hours forty-six inches of rain poured down.

The top of a mountain forming part of the Bued Canyon split, and a great mass of earth tumbled into the stream, making a dam a hundred and fifty feet high. When this burst, an avalanche of earth and stones, forced onward by a huge wave, hurtled down the canyon spreading ruin in its path. The Benguet Road was so wrecked that it was estimated that it would cost three hundred thousand dollars to restore it to usable condition. Fortunately, however, there came along another cloudburst that carried away most of the débris left by the first one, uncovering the roadbed to such an extent that it was possible to reopen communication for one sixth this sum. Storms like these are exceptional, to be sure, but torrential rains are usual in the wet season and it appears that the cost of maintenance of the road will always be excessive. Yet those who have tasted the joys of Baguio declare that the outlay involved is money well spent. I must say that I am inclined to agree.

I find it hard to describe this mountain capital. The whole scene has the effect of a great landscape garden designed by Jehovah and developed by man. It is a beautiful valley, or rather a series of valleys, with gently rolling hills surrounding them, making an amphitheatre with an arena watered by many streams and bordered by pines, tree ferns, and other plants of the semi-tropical zone. Within a stone's throw of where I am writing I see trees that remind me of the long-leaf pines of our South. Amid them rises a tree fern with a moss-gray trunk ten feet in height. Thrusting out of the top are nine great ribs like those of an umbrella, with many green fronds as long as my arm. The palms of the lowlands are absent, but there are wonderful orchids, and there are

wide slopes covered with grass as green and as smooth as the centuries-old sod of England.

The town of Baguio covers twenty square miles, or, to be exact, 13,557 acres. After the plans were made by Burnham, a force of Igorots and other natives were put to work. The ground was cleared, the roads were laid out, and sites for the many camps, residences, and other picturesque structures were designated and surveyed. To-day the effect is of one vast botanical garden with quaint buildings that harmonize with their surroundings.

I am writing this at the Baguio Country Club, which is about two miles from the centre of the town. In front of me is an eighteen-hole golf course, where I see a foursome of Americans, with Igorot caddies at their heels. Right under me, dropping down into a ravine, is a sunken garden, with terraced flower beds that extend halfway round the clubhouse. The roadways are bordered with flowers, and beds of geraniums, roses, and pinks form patches and strips of bright colours far down the canyon. There are big blue hydrangeas, blood-red bougainvilleas, and with them a variety of strange blossoms that would delight any botanist. A wide veranda surrounds the club, and sitting in the dining room, which is perhaps fifty feet square, one can look out through immense plate-glass windows on scenery as fine as that of the Riviera. The whole district of Baguio is a garden that would be the pride of any multimillionaire of the United States if he could drop it down near New York or Chicago.

Formerly the government moved up to Baguio during the hot months of the spring, which are the "season" at the resort, and transacted its business here, just as the government of British India does at its summer capital of

On Sunday the mountain people come to Baguio market from far and wide, on foot and in carabao carts, bringing wares to sell in exchange for the goods our civilization has taught them to want.

Not only is the Mountain Province a region of great natural beauty, but it also has many rich though undeveloped deposits of copper and other metals. Most of the hill tribes of Luzon live in this province.

Simla. But there were many complaints that this involved needless expense, so now the government does not come up as such, though many of its officials spend their vacations here. A number find good quarters at the Pines Hotel, which is not now government-owned, while others are accommodated at less expensive places in the town. There are comparatively few all-the-year residents, though many of the well-to-do people of Manila have summer homes at Baguio.

It was in a motor car in company with the government engineer who is mayor of Baguio that I drove for several hours through the city. It seems strange that one could spend so much time in covering a town of only six thousand people, but Baguio is spread out over the hills and valleys. The business part of the town and some of the chief buildings lie in a depression with a lake in the centre, upon which people are always paddling canoes. High above the lake is the city hall, a long, low, two-story green structure with white ribs crossing one another this way and that. In front of it terraced flower gardens extend all the way down the road near the lake.

On the hillsides of the opposite shore are the fine buildings of the government establishment, including a house for the Governor-General, and the slopes about are sprinkled with picturesque structures of one kind or another. Away up in the clouds is the massive rest house of the Dominican Friars, to which the Archbishop of Manila comes to escape from the hot season. A half-dozen mission organizations have beautiful upland homes here, and there are dormitories maintained by the Y. M. C. A. and the Knights of Columbus. The latter body has quite a large house in the town. Among the Protestant churches

represented by vacation homes for their missionaries and other workers are the Presbyterian, Episcopalian, Methodist, and the United Brethren.

There is a camp for school teachers with gardens and playgrounds, social and mess hall buildings, and khaki tents for sleeping. The American teachers use one section of the camp, while the Filipinos are quartered on the other side of the ravine just over the way. More than two miles from the city is Camp John Hay, with its big dormitory for enlisted men of our Army and Navy. These camps are delightful and the mountain air seems to put new life into the soldiers when they come up from the lowlands. Of the camp itself I shall write more later.

Baguio has a moving-picture theatre, a school for the Igorots, and a big hotel, with a garage that charges two dollars and upwards an hour for its cars. The city is the home of the administrator of the Benguet district, which has some thousands of Igorots within it. Their *barrios*, or villages, are scattered over the hills near by.

There is no town in the United States that is better kept than Baguio. The mayor is also the city engineer and maintains the roads, gardens, and buildings in almost perfect condition. The city owns all its public utilities. It operates the ice plant, the telephone exchange, and the garbage- and sewage-disposal systems. All the refuse is burned in an incinerator. There are municipal rock crushers run with current from a hydro-electric power plant, also owned by the city. The roads are given a fresh dressing of stone every few weeks. Baguio has its court and police, and last year there were about four hundred arrests. The persons arrested included four Americans, one Turk, three Japanese, one hundred and

eighty Filipinos, and one hundred and ninety Igorots. The mayor says that this town has the best form of city government in the Orient, and from the standpoint of efficiency I judge he is right.

It is impossible to estimate the value of such a resort as Baguio, not only to Americans but to the Filipinos themselves. Formerly many of the well-to-do Filipinos went to China or Japan for a change of climate, whereas now they can come up to the Benguet Mountains. The climate here seems especially suited to sufferers from tuberculosis, a scourge of the Islands, and many really remarkable results have been obtained by sending tubercular patients to live out under the pines and breathe this magnificent air.

As for the Americans, experience has shown that prolonged residence in the Philippines has a bad effect on the mental and physical condition of people not born and brought up in the tropics. While they may not become actually ill they lose their energy, grow irritable and forgetful, and find the least exertion burdensome. A trip to Baguio has often proved the best of medicine for such cases. These things have to be considered when posting the ledger of the expense of Baguio to the Philippine government.

CHAPTER X

OUR HEATHEN WARDS

ON THE way to Baguio, and since I have been up here in the Benguet hills, I have had a chance to observe some members of the non-Christian tribes that have had so much consideration in all discussions of Philippine affairs. Baguio is situated in the Mountain Province, which contains about sixty per cent. of the pagan peoples of the Islands. Here dwell the Igorots, the Bontocs, the Ifugaos, the Kalingas, and the Tinguians, while in the provinces near by are most of the Ilongots and Negritos. Among the hill folk are head-hunters and dog-eaters, men and women who go almost naked, and many who have no permanent homes, but roam the forests. Among them, too, are successful agriculturists and well-trained and efficient soldiers.

And before I go on, let me set down some facts that have been surprising to me. Although there are undoubtedly wild tribes in these Islands, tribes that it will take years to civilize, these primitive peoples are as much in the minority as are Protestants among Irishmen. I have written of the million native school children in the archipelago, of the five thousand students at the University of the Philippines, of the Filipino graduates of our own leading institutions of learning, of the Filipino provincial governors, legislative leaders, and heads of government departments. Such facts do not fit in with the idea of a

land largely populated by tribesmen. Nevertheless, the Filipinos complain that a great many of the people in the States seem still to form their impressions of the Philippines and their inhabitants from such things as the Igorot village exhibited at the St. Louis Exposition away back in 1904. Since these people went about nearly naked, ate dogs, and were head-hunters, it was generally assumed that they must be typical of the population of the far-away Islands of which we had lately got possession.

It seems natural that the Christian Filipinos should resent the fact that their civilization has been more or less misrepresented by the wide circulation in the United States of photographs and stories of the almost nude tribesmen of the mountains. We are so big and powerful a nation that we are only amused at the idea of some Europeans that all our country west of New York is populated with wild Indians, but it is different with the Filipinos, who have not yet achieved independence and a national life of their own.

Not long ago a wealthy Filipino saw in a freak show at Coney Island two of his fellow-countrymen joined together like Siamese twins. He could not bear to see his own people exposed in this way and promptly paid a large sum of money to free them from their contract. He brought them back to Manila where I understand they are living at his expense. There is now a law here against the exportation of human curiosities for exhibition purposes in other countries.

In the effort to keep Americans from continuing to form wrong impressions of them, the Filipinos are now going to the extreme of trying to prevent the publication of pictures of members of the non-Christian tribes as they really are

and have been since Noah sailed the ark. For example, the government no longer releases the photographs of semi-nude natives owned by the Bureau of Science, and the Filipino officials want nothing to go out from the Islands showing people not fully clad. If we in the United States took a similar position, we should have to show our red Indians only in swallowtail coats and white neckties, and photograph the barefooted pickaninnies of the South with patent leathers.

Suppose I give you the figures of the latest census. These show that of the total population of 10,350,730, no less than 9,463,731 are Christians. The number of non-Christians is less than a million, and of these nearly four hundred thousand are Mohammedans. Thus the pagan, so-called "wild tribes" number altogether only about half a million men, women, and children. It is thus seen that the Christian peoples, who are the only ones properly called Filipinos, make up about seven eighths of the population, while only one person in twenty belongs to the pagan tribes.

Compare the proportion of non-Christians in the Philippines with the Negro element in our own population. The 1920 census showed 105,710,620 people living in the United States. Of this number 10,463,131 were Negroes. In other words, about one tenth of our population belongs to the black race, or a ratio twice that of the pagans to the rest of the peoples of the Philippines.

Still, it is only natural for the traveller to write of the bizarre and the picturesque. In discussing the Chinese, for instance, he is apt to emphasize the fact that some of them live on rice and rats and to lay stress on their buttonhole eyes and bound feet rather than make much

of the fact that they have a civilization that antedates ours by thirty centuries or more.

The Spaniards never made any serious attempt to study the best way to handle the pagan tribes, and were quite willing to leave the ignorant hill folk to be exploited by the unscrupulous among their Christian Filipino neighbours. Our policy has been very different. We began at the beginning by sending ethnologists among the tribesmen to find out just what they were like and to study their needs. Some of the finest scientific brains of the world were enlisted in this service. It was soon realized that these people must be treated far differently from the Filipinos; that they must be protected; that their customs and religious prejudices must, within reasonable limits, be respected, and that their training must be suited to their capacity to rise to higher standards of life.

One of the reasons the Spanish never could dominate the Luzon pagans was the fact that at the very outset they insisted upon exacting "tribute" from these backward subjects. The hill people had no idea what a tax was. They thought the money was demanded as a gift to the men who collected it and wondered why they should give presents to people who treated them badly. After the American occupation it became a fixed principle with our administrators that no tax should ever be imposed upon a tribesman until he had been made to realize how it would mean a direct good to himself. Of course, mistakes have been made, but I do not hesitate to say that some of the finest work ever done for backward peoples has been that of American citizens among the non-Christian tribes of the Philippines.

The results already accomplished are truly surprising.

In the north, head-hunting has been practically wiped out and in the south the old pagan custom of making human sacrifices has been given up. Schools have been started everywhere among the tribes, even for the Negritos, not with the idea of turning out scholars, but for the purpose of teaching these people how to make the most of themselves and their native environment.

Lowest in the scale among the pagan tribes are the Negritos, considered by some authorities the aborigines of the Islands. The theory is that they were driven up from the coasts and into the mountains by an invasion of Indonesians from the surrounding seas. The Indonesians, who were in turn pushed inland by Malay invaders of a later time, were the forebears of the Igorots, Ifugaos, Kalingas, and other pagans of Luzon. There are about seventy thousand of these little blacks of more or less pure blood scattered through the archipelago, though most of them are found on the mountain ranges near the east and west coasts of Luzon. One group of considerable size dwells in northeastern Mindanao, and there are others in the Visayan Islands. A taller negroid type, known as the Mamanuas, live in the Surigao Peninsula of Mindanao. These people, unlike the majority of the Negritos, live in villages.

When the Spaniards arrived, they gave the small blacks the name of Negritos, or "little Negroes", and that is just what they are. They are Negroes in miniature, Negroes so small that one of the big black fellows of our coloured regiments could carry the average Negrito under his arm. I cannot say that I like their looks. They have very thin legs and very full stomachs, being afflicted with what is known in Porto Rico as the "banana belly," an enlarge-

The Bontoc Igorots are hard workers and fairly good farmers. They have forest laws and a forest service of their own for the protection of the sparsely timbered mountainsides of their rough country.

At the Episcopal school founded by Bishop Brent near Baguio young Igorot girls learn to replace the homespun wrap-around skirts of the tribeswomen with more civilized garments of their own sewing.

ment of the abdomen which comes from their starchy diet.

These little blacks live in the woods for the most part, although those who have for some time been in contact with the Christian Filipinos have adopted a somewhat settled mode of life. The nomads have no houses except temporary shelters of leaves and branches. They live wholly by hunting and trapping and gathering the wild forest products. They are ignorant of the art of swimming and have a great fear of the water. Their chief weapon is the bow and arrow, and they fish only by shooting from the bank of a stream with an arrow to which a string is attached so that they may pull out the fish without wetting themselves. In some places they go naked and in others wear clothing made from bark.

The average Negrito has but one wife, although he may acquire slaves by adopting his female relatives or the widows of his deceased friends. Girls are usually wedded by the time they are thirteen. In the marriage ceremony the groom catches the bride and drags her to her parents, telling them he wants to marry her. If the old folks consent, a coconut shell of water is poured over the couple, their woolly heads are pressed together, and from that time on they are man and wife. Whether the bride gets a new wedding waist cloth I do not know, but I am told that the two always go off by themselves on a trip through the woods during the honeymoon. This lasts for five days. Then they come back and live with the rest of their clan.

I heard much about the Negritos and saw some of them in the Zambales Mountains of western Luzon when I was with General Frederick Dent Grant during the Philippine Insurrection. The little men and women were sometimes

brought into camp and I saw them working as slaves for the Christian Filipinos. In the province of Pampanga a sugar planter showed me two, neither of whom reached to my shoulders, and told me that they had cost him twenty dollars apiece. I photographed one thirty years old who was no taller than an American boy of ten. He had woolly hair and his face was the colour of stove blacking. His name was Manuel. When the camera was pointed at him he fled with a terrified howl. The other Negrito was a slave nurse.

In travelling through the mountains we saw Negrito traps for deer and wild hogs which gave some evidence of their skill as hunters. The deer trap was merely a long bamboo pole fastened to the trees across a path down which the animals came to drink. The pole had loops of rattan so hung that the horns of the deer would become entangled in them; and when he pulled away the slip noose tightened and held him so that the Negritos could shoot him. When a deer is brought down by these hunters the carcass is always divided in the same way: the man who first wounded it gets the head and breast; the backbone goes to the one discharging the fatal shaft; one hind quarter is allotted the man whose dogs started the quarry, and the rest goes to any others in the party.

Sometimes women take the place of dogs in raising game. When a family makes a kill of a deer or wild hog, they halt upon the spot, dig a hole in the ground, put in the animal, and build a fire. Each takes the part he fancies and roasts it. Having eaten until they are gorged, they sleep. When they wake they go through the same performance, staying by their meat supply until it is exhausted, then moving on after more game.

So far as is known, the aboriginal speech of the Negritos has entirely disappeared. All of their vocabularies that have been collected show words of the Malay type, although they often represent forms that have long become obsolete among the other natives of the Islands. Dr. Otley Beyer, who is an authority on the peoples of the Philippines, is making further studies of these little blacks, and when I last saw him in Manila he was just departing with an expedition to live several months among those who inhabit the wilds of the island of Mindoro.

Much beyond the Negritos are such peoples as the Igorots, Bontocs, Kalingas, and Ifugaos, of the Mountain Province, of whom I shall write further in the chapters that follow. They build more permanent abodes, store up food for future needs, and have made some progress in handicrafts such as pottery, metalwork, and weaving.

The Mountain Province, in which live about three hundred thousand of the half million pagans of the Islands, is not governed like most of the other political subdivisions. Its affairs are looked after by the Bureau of Non-Christian Tribes, which is a part of the Department of the Interior of the Philippines. This Bureau was created by the Jones Act of 1916

> to continue the work for advancement and liberty in favour of the regions inhabited by non-Christian Filipinos, and to foster by all adequate means, and in a systematic, rapid, and complete manner, the moral, material, economic, social, and political development of those regions. . . .

It has jurisdiction over about forty per cent of the area of the Philippines, but it deals with only about one eighth of the population. Two of the provinces under it, the

Mountain Province and the neighbouring province of Nueva Vizcaya, are in Luzon and seven are down in the Moro country, in Mindanao and Sulu.

The Mountain Province was organized in 1908 and for some years the pagan tribes there were under the jurisdiction of the Secretary of the Interior, who was always an American, appointed by the Governor-General. The Filipinos were for a time largely excluded from handling the affairs of the Mountain Province, as it was generally believed they did not have the understanding and patience necessary in dealing with their half-civilized fellow islanders. But since 1916 there has been a Filipino Secretary of the Interior and now the head of the Bureau of Non-Christian Tribes is also a Filipino. Since they have been in office there have been, I am told, no radical changes in policy. In fact, in a recent report to the Governor-General the Filipino Secretary of the Interior states that the inhabitants of the provinces under the supervision of the Bureau "have now attained such degree of civilization and orderliness that they should no longer be called non-Christian tribes but non-Christian Filipinos."

CHAPTER XI

CAMP JOHN HAY AND THE IGOROTS

AT CAMP JOHN HAY in the mountainous land of the head-hunters I write of the pagan Igorots and how they are being led into the paths of civilization. These tribes of northern Luzon have their own laws and customs, and in governing them the most careful heed has to be paid to what they believe and what their people have believed from time immemorial. It is now eight or nine years since American officials planned a system of farm schools for this region. It was not proposed to turn these naked tribesmen into a white-collared, long-skirted people. The idea was to help the Igorots to work out their own destiny on their own lands by giving them a practical education.

From what I hear, since the Filipinos came so largely into control of their government they have been paying too much attention to shirts and pants for the Igorots and too little to the kind of education that will best fit them for the places they must hold in their tribes in the future. In Baguio, the Igorot boys are not allowed to attend school clad only in the simple gee string they wear at home. When the Igorot soldiers of Camp John Hay were sent not long ago to take part in a procession at Manila, the *políticos* were horrified to find that they came barefooted and barelegged, with coats reaching only halfway down their thighs. Now, by order of the government, these

soldiers are dressed in the complete uniform of our army, and must climb the mountain trails in clumsy shoes of coarse cowhide.

Camp John Hay is a work of art in landscape gardening and is kept up like the grounds of a millionaire's suburban home. I doubt if there is a more interesting or more beautiful camp in all the three and a half million square miles over which floats the American flag. It is situated on the roof of the Philippine Islands, almost as high up as the top of Mount Washington, and consists of about eighteen hundred acres of hill and hollow, spotted with buildings of one kind or another. All about are tall pines and hardwoods and fern trees. There is an Italian sunken garden in the midst of which is a fountain playing over the statue of an Igorot woman. The golf course would be considered a treasure by any country club of the States. The camp has a wonderful open-air theatre with an arena as big as that of the old Roman amphitheatre at Arles in southern France. The concrete stage is built around a tree in the centre, and the seats are terraces bordered with flowers. There are hundreds of acres of green lawns, miles of fine roadways, and the barracks where the Igorots live are comfortable beyond anything they have in their own *barrios*. There is an electric-lighting plant, a cold-storage plant, a commissary store, and the full equipment of a settled community.

The camp is one of the great civilizing forces among the mountain tribes. The troops quartered here consist of Filipinos, Americans, and Igorots. The Igorot likes to have his people with him and numbers of relatives always follow the soldier to camp. The men of the two Igorot companies have with them their families, includ-

ing not only their wives and children, but also their parents, grandparents, uncles, and cousins. The government is taking advantage of this custom to teach the Igorots how to live more comfortably than they have lived in the past.

In connection with the camp itself, the military authorities have established an Igorot village where these former savages and their families are learning how to improve their living conditions. Here, under government direction, they have put up comfortable frame houses instead of the shacks built upon posts that they had in their native villages, and they are being taught the fundamentals of cleanliness and sanitation.

When the Igorot first comes to John Hay he is clad only in a striped homespun cloth about ten inches wide and two yards long. This is wrapped around the waist, drawn between the legs, and tied so that the ends form little aprons front and back. He usually has in addition a travelling bag of about the same shape and size as the handbags that American girls carry. It is fastened to the loin cloth by a ring at the top so that it rests on the small of his back like the cartridge boxes our soldiers used to carry on their belts.

When the Army takes such a recruit in hand, it cleans him up, cuts his hair, attends to his finger nails, puts clothes on him, and gives him a square meal. Twenty-four hours later you could not recognize the naked tribesman that enlisted. As a soldier he learns many things. He is taught how to put in a window or hang a door, to lay up stones, to shoe a horse, to repair a wagon, and to drive mules. He learns how to build a house; and when after three years he goes back to his own village, he usually

puts up a dwelling for his family of the same sort as the one he had at Camp John Hay. While here he is given some schooling, and his children learn a great deal.

I have visited all parts of the camp, chatting the while with the American officers who showed me around. They spoke in the highest terms of the Igorots, saying that they make excellent soldiers and are quick to catch on to new things. I have asked about the practice of head-hunting among the mountain tribes, and am told that its basis is somewhat like that of the family feuds in the mountains of Kentucky and Tennessee. When two men of different Igorot clans get into a quarrel and one is killed, the family of the killer has to pay with a life and so at last many lives are forfeited. In Tennessee the feudists use a gun. Here the weapon is a spear, and the head of the victim is cut off with a bolo and carried home as a trophy.

The government has been able to wipe out most of this head-hunting, but it still breaks forth now and then. Only the other day an Igorot boy from one of the agricultural schools, having decided to marry, went out and took five human heads in order to show them as trophies at his wedding, and to have them to ornament his new home. He was pursued by the authorities but has not yet been caught.

While making a trip through the mountains recently I met a party of five long-haired Ilongots, pagan tribesmen not unlike the Igorots, who were handcuffed and under the guard of two of the Philippine Constabulary. They had been caught in the act of taking the head of a man they had just killed. Whether they will be executed or not I cannot say. The native governor of the province was

The beautiful amphitheatre at Camp John Hay was built by Igorot labour and planned somewhat after the fashion of the mountaineers' rice terraces. The camp is one of the greatest civilizing forces in the Mountain Province.

"Cases of head-hunting are now rare among the non-civilized tribes, but on my trip through the mountains I met these Ilongots tied together and on their way to prison for having taken a head."

with me at the time, and permitted me to make a photograph of the head-hunters. They did not seem desperate characters; indeed, they looked more like women than men.

These Ilongots, of whom there are only about six thousand in the Islands, are far more savage than the Benguet Igorots and have always waged war on the Christian tribes near them. They live for the most part in the forest, and a few of them build their houses in the trees. Though the men are short in stature, they are taller and stronger than the Negritos, who are in some places scattered among them. They have inter-married with the Negritos so that now and then one sees woolly-haired Ilongots. The women often wear short skirts of bark cloth, and the men have a peculiar hair net over the forehead.

Each of the mountain tribes seems to have had its own methods of head-hunting. Whenever a new head was brought into their villages, the Kalingas, who live not far from Baguio, celebrated the event with shouts and war cries. They dipped pieces of bark cloth in the blood, and hung them over the doors of their houses. The head, which was cut off with a special axe, was occasionally chopped into as many pieces as there were members of the head-hunting party, so that each might take home a trophy. It is said that they sometimes stirred the brains into a liquor, and the mixture was served as a sort of cocktail to all who wished to partake.

The skull was cleaned, and the lower jaw was broken off and used as the handle for a gong. The remainder of the skull was kept as a relic to figure in certain ceremonies, the object of which was to insure good crops. In the war dance that formed part of this celebration, the head was

placed in the centre of the dancing ring and the nearly naked warriors and their women circled around it with victorious cries and chants. I saw a dance of this kind not far from Camp John Hay, and though a *papier mâché* head, spattered with red paint to represent bloodstains, was used instead of the real article, the effect was extremely weird.

Dr. Roy Barton, who has long lived and taught in the Mountain Province, tells me that among some of the tribes the people believe that the strength, life, and soul of the victim of a head-hunt will go into the bodies of the members of the clan responsible for the capture. It will insure them good crops the next year, will give the women more children, and bring general prosperity. This being the case, I daresay the practice goes on *sub rosa* whenever the tribesmen feel that they are sure not to be caught by the vigilant police. It is also said that the old women of the tribes do much to keep alive the practice of head-hunting by telling the young men that they have not proved themselves worthy of marriage until they have taken a head.

The other night a dance of the Igorot men and women of Camp John Hay was staged out in the open for my benefit. There was a glorious moon and the logs of the great bonfire blazed away, making broad lines of light and shadows under the big trees. Though it was light enough to see every motion of the dancers, there was something ghost-like in the scene, and I kept thinking of the dance of the witches in Macbeth. Each "number" was announced by a straight and sturdy Igorot, clad only in the headdress and black and red loin cloth of his tribe. The music, which changed at every dance, was furnished by brass

gongs the size of a frying pan, which were pounded and rubbed in such a way that they produced a harmony wild and strange. There were none of the sensuous tones that I have heard from tom-toms in the wilds of Africa, and now hear again in the "jazz" music to which our fashionable society dances. Here was rather a martial rhythm telling of victory and inciting to war.

In some of the dances the men wore only gee strings around their waists and great feather ornaments on their heads. Some had brass anklets and leglets of brass coils six or eight inches wide extending from below the knee to the swelling of the calf. These glittered as they moved back and forth before the blazing fire. The women wore striped jackets and skirts that just covered their knees. Their arms were bare, and they had coils of brass from their wrists almost to their elbows.

The dancers turned and swung this way and that, each seemingly independent of the others, but all in a surprising harmony of movement. At times they tossed their hands into the air, and what they did with their arms seemed to be quite as important a part of the dance as the movements of their legs and feet. Now they jumped up and down, making me think of the folk-dances of the Eskimos, and of the Russian peasants; again they swayed back and forth. Their mahogany skins shone like varnish in the firelight. In one number, announced as the war dance of the Ifugaos, we had a battle right under our eyes. The dancers were armed with shields and spears and fought to the sounds of the brass gongs. Their shields clanked together, and their knives flashed. I have seen many a fencing match on the stage, but none that showed more action than this realistic performance in the wilds of Luzon.

A good way to get an idea of the several different tribes about Baguio is to visit the Sunday market. On that day the mountain people come from far and wide, on foot and in carabao carts, bringing in their wares to sell so that they may buy the goods our civilization has taught them to want. The market house, which is in the centre of Baguio, covers perhaps a quarter of an acre, but last Sunday the real market extended along both sides of the road for a half mile beyond this building, and there was a great field covered with half-naked peddlers seated on the ground. Some of the men had on nothing but loin cloths, but most of them wore shirts or jackets reaching to their thighs. In nearly all cases the gee string took the place of trousers.

I saw few women in the market who would reach to my shoulder, and the men were only about six inches taller. The young girls were straight and plump and some were not unbeautiful. I notice that the Igorots generally have small and delicately formed hands and feet. The older women are, to say the least, plain, for their hard work brings many wrinkles, and at thirty-five they seem to be sixty. Those in the market were well covered. They wore jackets to the waist, and their skirts were made of blue and white strips of cotton cloth wrapped tightly around the hips and falling to their bare brown calves. Most of them had a wide band of cloth around the forehead to hold in the long black hair that fell to their knees. Nearly all, both men and women, were chewing the betel nut, and their chins were streaked with bright red saliva. Many of the women smoked cigarettes and I saw a number with cigars as big as a broom handle sticking out eight inches or so from under their noses. Not a few had neck-

laces of beads, and some of the girls wore bracelets of coiled brass that shone like gold on their mahogany arms.

I missed one commodity that was formerly a striking feature of this market. I refer to the dogs, once numbered by scores and sold alive to be killed and eaten by the purchasers. The vendors used to bring in the animals in strings with splints of bamboo tied to their heads so that they were not able to bite. Meat is scarce among the Igorots, and back in the mountains a favourite feast is a fat canine of just the right age.

For much the same reason that they object to pictures of naked Igorots being circulated as if they represented typical inhabitants of the Philippines, the Christian Filipinos object to the stories that the whole people live on dog meat. Everyone who knows anything about the Islands knows this is not true, and the Governor-General, who is a diplomat as well as a statesman, and studies to please, issued orders some time ago that no more dogs should be sold in the Sunday market in Baguio. The open marketing stopped, but after my visit to the scenes I have described, I sneaked off with a guide to a valley near by and there saw dogs being bought and sold. It made me think of the surreptitious and unlawful selling of liquors at home. These men were no more nor less than bootleggers in dogs.

CHAPTER XII

THE BENGUET GOLD MINES

THERE is gold in the Philippines. Away off here in these lands of the tropics I have found men slaving for the same yellow metal that for centuries has lured adventurers across the seven seas to the mountains of Peru, the frozen river beds of Alaska, and the rock reefs of South Africa. I have before me an economic map of the Philippines recently published by the Bureau of Commerce and Industry. Every place where there are gold lodes or placers is marked by a red circle with a cross in the centre. I noticed these red rings all over the map, in some islands widely scattered, and in other regions so close together that they might have been showered out of a pepper shaker. So far, however, the production has not been large.

More than a thousand years before the Philippines were visited by Magellan, gold was gathered here. There are said to be records of its being found in the third century, A. D., and during the last three hundred years mines have been operated by natives, Spaniards, British, and Americans. Although gold mining was carried on more extensively in the Philippines before than after the Spaniards came, some gold was shipped in the Spanish galleon that in the old days sailed each year from the Islands across the Pacific to Mexico. The precious freight was trans-

ported overland to the Atlantic coast and thence shipped overseas to Spain.

I am writing in the Antamok Valley, which is some two hundred miles north of Manila, and about twenty-five miles from the sea by way of the Benguet Road through Baguio. I am in a canyon a thousand feet below the highway, and the mountains around me are peppered with white slabs, each marking a gold mine.

I have just gone through the mills of the Benguet Consolidated, a company of American capitalists, all residents of the Philippine Islands. Within eight years this concern has taken out in the neighbourhood of five million dollars in gold, and its mine is now yielding one hundred thousand dollars a month. Its dividends last year were approximately fifty dollars an hour, day and night, Sundays and week days, all the year through, a total of four hundred and twenty-five thousand dollars, yet a few years ago its shares sold for as little as ten cents each. There is now about a quarter of a million tons of ore in sight, the estimated value of which is close to five million dollars. The property is managed by Americans, with seven hundred Igorots and Ilocanos furnishing the labour.

Since I came to Antamok I have gone through this mine and its mills with the superintendent, and have watched the naked workers digging the ore. All around me I can see the abandoned holes of the Igorots, who had been working this region long before we came to the Islands; and I am told there are still hundreds of them mining here and there all over these mountains. In this Benguet district there is a belt sixty miles long and four or five miles wide so highly mineralized that if it were in the United States every square foot of it would be pegged out in claims and

the neighbourhood about would be alive with prospectors. There are known veins of ore yielding from six to ten dollars and upwards per ton, with patches that contain as much as twenty dollars to the ton. For four years the ore taken out by the Benguet Consolidated averaged a yield nearly that high. The Igorots with their crude methods will not mine veins that return less than seven dollars a ton, and select only the rich stringers in the outcroppings. The holes they have made show where the gold is, however, and hundreds of comparatively low-grade propositions are thus marked out, awaiting the miners who by using modern equipment can make them pay.

I asked the superintendent to tell me something of the native mining methods. He replied:

"By going a few miles over the hills you can see them for yourself. The Igorot mines are scattered about everywhere. Many of them follow the earth slides. The torrential rains sometimes start half a mountain slipping. As the earth moves, the bed rock is laid bare, and the Igorot miner goes over it searching for gold. He looks for the rich veins, and follows them back into the hills, making tunnels that are often so small that he has to crawl in head first, and back out with a hat full of the gold ore at a time. The Igorot breaks the rocks into bits, crushes them with a little stone roller on a flat stone much after the fashion of primitive grain grinding, and then washes out the gold in a pan of bark. Both women and men work at the crushing and washing. They put the free gold and dust they recover into tubes of bamboo and bring it in to the merchants for sale.

"The Igorots have ingenious ways of breaking up the rock by making fires on the veins, and they mine hydraulic-

The Apayaos wear more clothes than is usual among the former head-hunting tribes of northern Luzon. The women never expose the upper part of their persons except when they are in mourning.

The Igorots are born miners, and for generations these former head-hunters have been getting out gold from the Philippine mountains. Their usual mining costume consists of a shirt and a gee string.

ally by damming a stream near the top of a hill and letting the water sluice the earth down. In recent years, however, many of them have learned to use American mining tools."

So much for the native miners working their own prospects. Come down into the company mine with me and see how these semi-savages dig out gold for the Americans. We climb up a shaft house, and enter a small elevator with barely enough room for three to squeeze in. At a signal given by pulling a cord outside the elevator, we drop slowly into the darkness. At the first level is a machine shop where half-naked Igorot blacksmiths are at work sharpening tools. We continue to descend, and at the second level see half-a-dozen brown men clad only in gee strings and caps, their bare backs and legs wet with the water that seeps through the earth. They look as busy as the mountain dwarfs of the German legends, and as they wield their picks the lights in their caps cast weird shadows on the walls of the mine.

Finally we reach Level E, four hundred feet below the surface. At the sound of rushing water, we look down and see a torrent racing along at our feet. Here we leave the elevator and walk for a half mile along the little railway through the tunnels, the walls and ceilings of which are shored up with pine timbers eight inches square.

We are now at the main vein. The ore is a mixture of white, gray, and pink quartz, and iron sulphide; it looks much like a stratum of dirty rock salt. Though there is no sign, no glint of gold, nevertheless, this ore averages forty-eight dollars a ton. Farther on is another vein a half yard wide; the gold seems to run in long streaks a few feet apart. Now we step to the side of the track. A steel

car filled with ore is coming over the railway. It is pushed to the shaft by Igorots, and lifted by machinery to the crushers above.

Returning to the surface, we go through the plant which climbs the hill from the valley to the height of a fifteen-story building. As it comes out of the mine the ore is first carried to the top of the mill, whence it moves by gravity down through the various processes. All the machinery is as up-to-date as that of any gold mine in the United States, for this plant is operated along thoroughly modern lines. The ore treatment consists of crushing and stamping the rock in a cyanide solution and grinding it to a powder so fine that it will pass through a hundred-mesh screen. It is ground in mills, where loose steel balls as big as your fist rub against it, and in great rollers filled with pebbles of smaller size. After the ore has been turned to a fine paste it goes into vats almost as big around as a city gas tank, where it is stirred by machinery for nine days. By this time all the gold has been absorbed by the cyanide solution.

The next process is to separate the metal from the water and cyanide. This is done with zinc dust. The gold, which left its first love, the quartz, to mate with the cyanide, now clings to the tiny zinc particles introduced into the solution. Soon the gold is all on the zinc which has only to be melted to yield up its treasure. The crushers and grinders and all the machinery seem to be built like a watch and to work with absolute accuracy.

Every day the ore going through is sampled and assayed fifteen or more times. I watched the chemists in the laboratory making their tests, which are so delicate that some of the scales used will weigh the hair of a baby. In

fact, to test them I pulled out one of my eye winkers, and laid it on the brass balance. It weighed three tenths of a milligram, so little that, as we figured it, it would take thirty-two thousand similar hairs to weigh one ounce. With all this care the mining experts are able to recover about ninety-three cents out of every dollar's worth of gold in the ore. To get a larger percentage would cost more than it is worth.

After the gold is melted down, it is cast into ingots, each of which weighs two hundred and fifty ounces and is about as big as the ordinary building brick. The bricks, which are worth around twenty-five hundred dollars apiece, are not all pure gold; they are one fourth silver and one half gold, the rest being baser metals. They are shipped by registered mail to San Francisco to be refined.

The Benguet Consolidated has its own power plant to run the mills and work the mighty pumps that lift water from the depths of the mine. There is so much water in these mountains that the pumps have to take out six hundred gallons a minute even during the dry season, and three thousand gallons a minute when the rains come. Then there are such torrents that if the pumps were to stop for a quarter of an hour the workings would be flooded.

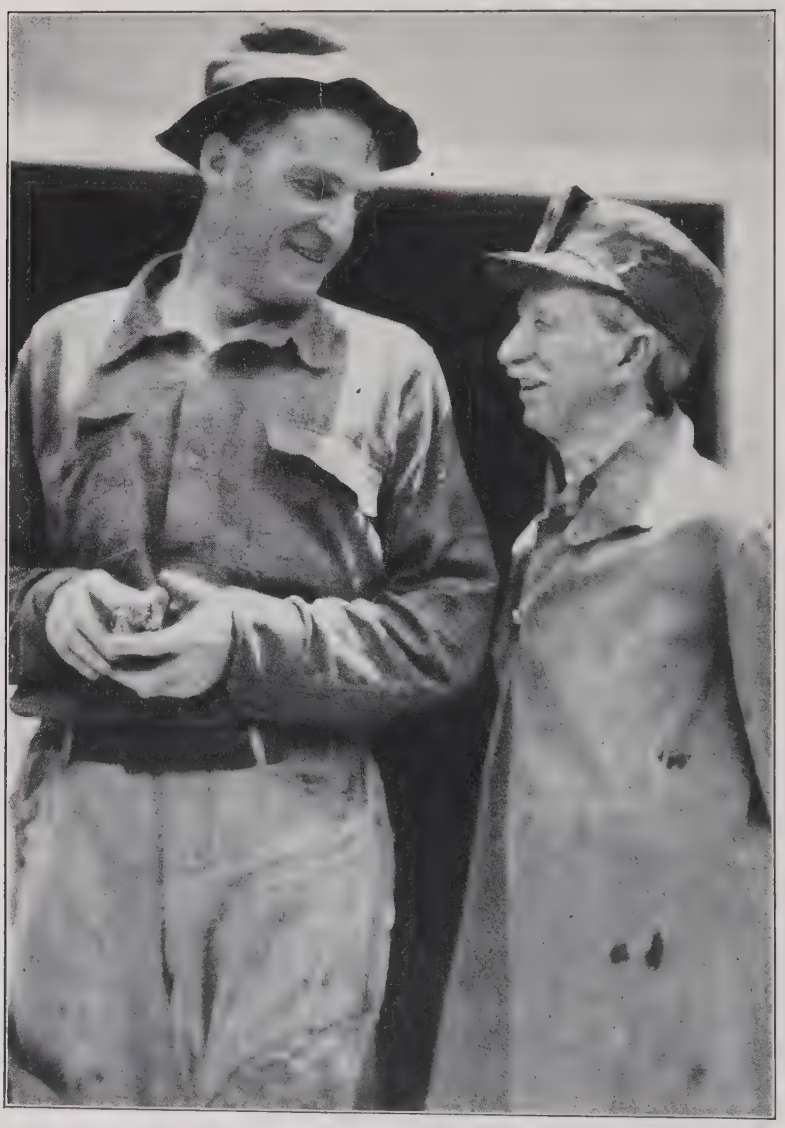
Starting and maintaining a modern mine in the midst of the Benguet hills was a job of immense difficulties. Consider, for example, the work of getting the heavy machinery into this canyon. The massive pieces of iron and steel had to be let down a smooth place on the wall of the mountain and swung across the ravine on an aërial tramway. All the supplies for the mine and the food for the people still have to be carried down over a cable nearly half a mile long. The drop is almost equal to that

from the top of the Eiffel Tower in Paris. The heavy timbers for the mine come down on trolleys slung on the cables. The company had to build houses for the hundreds of native labourers, and set up a store stocked with supplies. It maintains, in short, a little community in the bottom of the canpon.

Such operations are expensive, yet the Benguet mine costs less to run than do similar properties in the States. This is because the native labour is much cheaper than ours. For eight or nine hours' work the underground miners get sixty-eight cents, while the mill men average seventy cents. These rates are a little above the ordinary wages paid in this region. Besides his pay in money, every Igorot and Ilocano has to have a ration of one quart of rice a day. I am told that, measured by the standards of the Far East, the natives make efficient miners, yet the output of ten of them is hardly equal to that of one good American miner, so that, after all, this labour is not so cheap. The few Americans employed, on the other hand, get much more than they could make at home.

Each miner pays a rent of two dollars and a half a month for a much better home than he has ever known before coming to the mines. These natives are great home lovers and sometimes when a man's work is eight miles or more from his hut he will walk back and forth every day rather than sleep overnight away from his own nipa thatch. On one occasion, when fire destroyed a settlement of thatched huts in which some of the miners lived, the company seized the opportunity to put up better houses. The natives liked their Americanized quarters, but each insisted that his new house should be built on the exact spot that had been occupied by his burned hut.

The Benguet gold mine lies at the bottom of a canyon so deep and inaccessible that mining supplies and food for its hundreds of employees must come down on a cable nearly half a mile long.



"I put on miner's clothes and went with the superintendent to see how modern American mining methods are being applied in a gold mine and stamp mill in the mountain wilds of Luzon."

THE BENGUET GOLD MINES

Someone has suggested that it might pay gold seekers in the Philippines to investigate the old Spanish records. The colonial government kept careful account of all mining operations, for a large percentage of the gold obtained had to go to the king of Spain. According to these records, the mines at Mambulao in southeastern Luzon once produced a thousand ounces, or twenty thousand dollars' worth of gold, a week. These mines were worked by the natives before the Spaniards came, and in later years were in the hands of an English syndicate. But the Britishers could not get the natives to work well for them, and their operations were unsuccessful. When the Spaniards first came to the Islands they took from the natives and sent home considerable gold in the shape of bracelets, chains, and ornaments. Two of their ships from this part of the world were captured by Sir Francis Drake, who, as the story goes, took such a rich booty that in China he was able to fit out his vessel with silken sails which sped him proudly back to London.

The Philippines have other mineral wealth besides gold. Almost every island in the archipelago and a majority of the provinces contain coal or lignite, yet between two and three million dollars' worth of coal is imported annually, most of it from Japan. Philippine coal is quite soft and powders easily. Iron castings, mostly for agricultural implements, have been produced in the Islands since 1664. A few crude native furnaces are still making such castings, but the output has fallen off a good deal since the introduction of American ploughs. Important iron deposits have been located in Luzon and Mindanao. Other minerals known to exist in the archipelago are silver, copper, lead, zinc, manganese, and petroleum.

CHAPTER XIII

THE SCHOOL REPUBLIC OF MUÑOZ

A BOY republic in the heart of Luzon!

Eight hundred brown-skinned lads, Christians, Mohammedans, and pagans, representing forty different provinces, from the head-hunters' regions of northern Luzon to the haunts of the once piratical Moros of Mindanao, living together and ruling themselves!

Hard-working students who elect their own officials, have their own police, run their own bank, store, and farms, and carry on in common all the activities of an agricultural community!

A farming organization of boys of fifteen and upward who are working their own way, entering with nothing, receiving no support from charity, and in some cases coming out with enough to start little farms of their own!

Representatives of almost a thousand families, whose parents live for the most part in thatched huts, studying in the English language the books used in our high schools and academies, learning trades, and preparing themselves for patriotic citizenship and useful work!

These are the high lights of the Central Luzon Agricultural School at Muñoz in the province of Nueva Ecija about one hundred miles north of Manila and fifteen miles from the end of a railway. To reach here from Baguio I motored back down the Benguet zigzags to Damortis,

then turned off to the road to Manila, upon which Muñoz is situated. How strange it seems that in what was so lately little more than wild jungle there should have grown up such an agent of civilization as this school community on a main travelled route between north and south Luzon!

When the Americans came, this part of the island was a jungle covered with trees draped in interlacing vines and inhabited largely by monkeys, deer, buffaloes, and wild hogs, with here and there perhaps a naked Negrito hunting his food in the woods. Under the government's plan of development the wilds were thrown open to homesteaders, and a tract of fifteen hundred acres was set aside for an agricultural school at Muñoz. Now, as far as I can see, reaching beyond the plains to the mountains, there is nothing but well-irrigated farm land. The land has been plotted, the trees have been cleared away, roads have been built, and a great concrete dam is being constructed in the hills to store water for irrigating twenty-five thousand more acres, or something like five thousand additional farms.

The school acreage was cleared by the boys themselves. In the beginning the work was so appalling that at the end of two weeks the first lot of student recruits threw down their axes and gave up the task. But the school authorities gathered together another body and month by month, under the stimulus of good American teachers, they went on until every acre was cleaned up.

For the past few days I have been going over this big agricultural school, tramping from farm to farm, studying the various institutions, and talking with the students. The boys all speak English, rather better, I understand,

than is usual among Filipino pupils, as the average native teacher passes on a strange pronunciation of our tongue. Among other things the students have a printing shop where they set English type and issue the various forms, blanks, and pamphlets required. They publish *The Student Farmer,* a little monthly magazine, to which students and faculty contribute articles. The motto of the magazine is:

Be strong!
We are not here to play,
To dream, to drift.
We have work to do
And loads to lift.

Each number is full of inspiring suggestions such as one finds in Smiles's "Self Help" and Tupper's "Proverbial Philosophy" but it has good farm stuff as well and parts of it would be a credit to the publications of many an agricultural college in the United States. I have five volumes of the magazine lying before me, and I consider them an addition to my library.

The motto I have quoted typifies the spirit of the school. The boys are enthusiastically proud of the institution. It is alive. The students are ambitious and seem to realize that they are starting on the road to fortune. They are as manly as the boys of the States. Those I have met are extremely courteous, and all seem to have the spirit of good fellowship. They regard their institution much as the college man of the United States does his alma mater.

The boys have constructed most of the school buildings. The one with the classrooms covers perhaps three fourths

One of the crops grown at the Muñoz School farm is corn, generally despised in the Islands as "poor man's rice." The people are beginning, however, to understand its value in human diet and as fodder for horses and carabaos.

Much of the land at Muñoz is first broken up by tractors, but all the tilling is done with the ordinary plough. The farm is divided into allotments of seven and one half acres, each worked by a group of students.

If the four boy farmers on an allotment furnish their own carabao for ploughing, they get 90 per cent. of the crop raised; if they furnish implements as well, they get 95 per cent.

of an acre and has a good concrete foundation, concrete walls, and an artistic overhanging steel roof. The doors are of Philippine hardwood, and the windows are of shell.

I was interested in the library and reading room. It is a big room, about thirty by fifty feet in dimensions. When I went in most of the big shell windows were half open and the air was delightfully cool. I noticed that the walls were lined with books, and the long tables were covered with papers and magazines. There were perhaps fifty boys in the room reading, studying, and making notes.

In going through the school, I was conducted by the principal, a graduate of Ames College, Iowa. My guide through the workshops and over the farm was a New Yorker, who is the acting superintendent of the institution. It was he who organized the successful agricultural school for the Igorots of the Trinidad Valley not far from Baguio, and he has had a wide experience in this sort of educational work. With him I visited the blacksmith and wagon shops, and a number of other buildings devoted to manual training. These were all of the cheapest character consistent with service, and were adapted to the tropical climate. The foundry, for instance, has an open fence for walls and its roof is of galvanized iron; and the wood-working shop, where furniture as fine as that of an old-fashioned cabinet maker is turned out, is the same kind of structure. In the latter shop the boys were making doors and chairs of Philippine mahogany for a teachers' college. The engine that ran the saws and lathes and turned all the machinery was that of an American tractor which was backed into the building. Though it developed only twenty horse-power it kept the wheels going round.

The students at Muñoz get four cents an hour for their labour. The schedule is so arranged that half of their working day is spent in the classrooms and the other half on the farms or in the shops. Two boys are allotted to each job, one of whom works in the morning and the other in the afternoon, both thus giving half his time to school and half to manual training throughout the week, while the job in hand gets a full day every day. There are twenty boys in the blacksmith shop in the morning and twenty others are on the afternoon shift. This plan works well. The boys' labour is not compulsory, but those who are idle cannot get credit for their time and they soon pile up debts that prevent their continuance in the school.

Leaving the workshops I went through the printing office, stopped at the photograph establishment, inspected a store where the students can buy things practically at cost, and then went on to the bank where the accounts of these eight hundred boys are kept.

This bank, which is run entirely by the students, occupies the second story of a big iron-roofed building. The counting room is as well equipped as that of the ordinary small bank at home. It has its cashiers and tellers, and its clerks operate the usual typewriters and adding machines. Every student has an account, being credited with the proceeds from the sale of his crops or with his wages for work in the shops, or with his salary as postmaster, telegraph operator, clerk, or policeman. Everything raised on the farms is sold at fixed prices to the school management, which markets the products and gives the young farmers the proceeds, less a small discount to cover overhead and selling expense.

Against each boy's account are charged his withdrawals for sustenance and expenses and for his purchases at the general store. He has to maintain a balance at the bank, which at the end of his course often amounts to as much as four hundred dollars, a tidy sum for equipping a farm. I looked over the card files, and at the ledgers where the credits are in black and the debits in red. I noted that one boy had a balance of three hundred pesos. In explaining the accounts, the young clerks showed their thorough understanding of the simple banking they do.

Pupils are admitted to Muñoz on examination or on certificate from other schools; and the place is so popular that more than one thousand applicants are turned away every year. Among those enrolled are Moros, Tagalogs, Igorots, Ilocanos, Visayans, and Ifugaos, in short, representatives of practically all of the Christian peoples as well as some of the Mohammedan and pagan tribes.

The Muñoz graduates are a leaven for the whole farm population of the Philippines. At the end of one school year, for example, one hundred of them volunteered to go to Mindanao to start development work in that southern island. Four hundred were already there and in Sulu, some of them teaching in the schools, others showing the Moro farmers how to get the best results from their wonderfully fertile soil.

The school is governed by the boys. They elect their president and vice-president, and make and enforce their laws. The students are divided into groups according to what part of the Islands they come from. Each group has its students' council, and each elects members to the general council which has regular meetings. Business

meetings may be held at any time out of school hours at the call of the student president.

The judicial branch of this school republic consists of a judge and an assistant appointed from the student body by the superintendent. The student president appoints a chief of police, who chooses his own patrolmen. The police arrest any who break the laws of the school, and summon them to the court, where the accused can conduct his own case or have counsel from the student body if he prefers. Some cases are settled outside the court. All court proceedings are conducted in an orderly manner. Penalties are generally in the shape of fines, which are real punishments to these boys, most of whom are from poverty-stricken homes and know not pocket money. Fines, then, must usually come out of their small earnings here at the school.

The student officials are paid, the chief of police, for example, getting five cents an hour. There are three classes of students: industrial workers, farm workers, and officials. All are paid wages except the farmers, who take their chances of making what they can off the crops.

But let us see how the boy farmers handle their property on this fifteen-hundred-acre farm. Much of the land is first broken by tractors, but all the tilling is done with the ordinary plough and a bullock or carabao. The tract is divided into allotments of three hectares, or seven and a half acres each, and four boys are assigned to an allotment. On it they build a house in which they do their studying, cook their meals, and sleep at night. They cultivate the land under the direction of the superintendent, putting in four hours of farm work and four hours of study each day. If the boy farmers furnish neither tools nor a

carabao, they practically lease the land of the school for three fourths of the crop. If they furnish the carabao they get ninety per cent. of the crop, and if they can supply both the carabao and their farm tools they receive ninety-five per cent. On some of the tracts I have visited the young men have bought their own draft animals, and on some they own the farm tools as well. Some have pigs and chickens besides.

The homes of these boys are scattered far and wide over the school lands. The one I selected to visit was a typical shack of grass and bamboo. It was one story high, about twenty feet square, and the floor was four feet from the ground. The roof was grass thatch, and the walls were of grass and bamboo basket work, the partitions separating the rooms being bamboo. The floor was of bamboo poles and there was a bamboo porch.

The kitchen was in a lean-to even with the floor of the house. The stove was a box three feet square, and about a foot high, filled with ashes and sand. Within it upon three legs stood the clay cooking pot, and near by was an old oil can used to boil the food for the pigs.

The floors and walls were loosely built so that the air might blow through, an important matter in a tropical climate. There was no glass in the windows. The shutters consisted of sheets of woven bamboo splints hung by a string so that they could be raised or lowered at will.

Under the floor of the house, where the farm implements and other tools were kept, I saw some green bamboo poles about twenty feet long and as thick as my wrist. When I asked my guide to show me how they make their building material, he spoke to one of the students. The boy pulled out a pole and with one stroke of his bolo split

it from end to end. He then went over it with the bolo, making cuts at the knots. In a short time he was able to flatten out each half of the cane into a board not as thick as a lead pencil and about three inches wide. He made two such boards for me in less than five minutes. There are practically no nails in these bamboo houses. The woodwork is put together with pegs and the bamboo and grass are tied on with strips of rattan and bamboo. The house I saw cost only about twenty-five dollars to build, including both labour and material.

The next home I visited belonged to four boys from the Visayan group of islands. Their artistic taste was shown in the walk from the road to the porch which was lined with hedges of beautiful flowers, and in the vines they had trained to grow over the porch. The house was about twenty-four feet square and had outbuildings in which were the carabao and cart that the four young farmers had bought. They told me they paid one hundred and fifteen pesos for the carabao and sixty pesos for the cart.

Together we went up the steps and inside the house. It was divided into four rooms, one of which was a kitchen and dining room combined. At each end was a bedroom containing two beds, and in the centre was a bamboo-floored study and sitting room with a good-sized table. I picked up the books lying on it and looked at the titles. One was a history of the United States, another a small Webster's dictionary, the third a Year Book of our Department of Agriculture, and the fourth a volume entitled "English Poems—From Chaucer to Kipling."

How marvellous the changes brought about in less than a generation! Here were boys whose fathers had grown to manhood, perhaps, without ever having heard a word

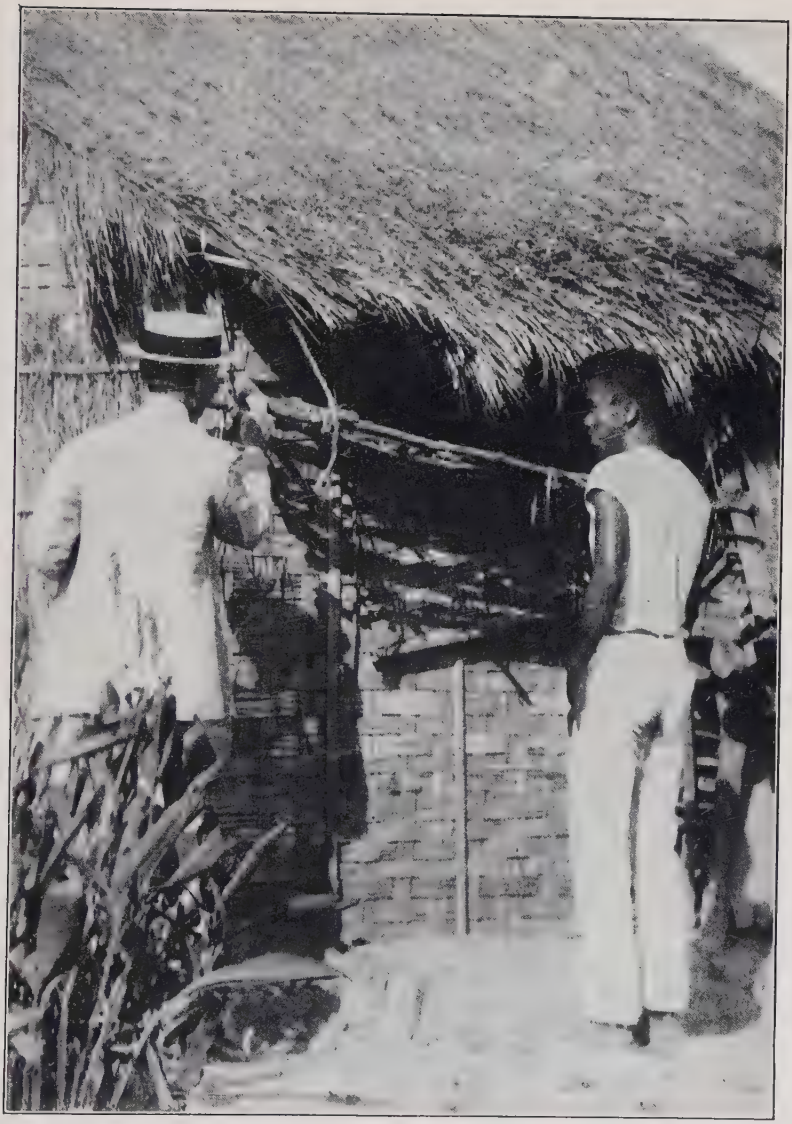
of English, yet the sons were being taught an appreciation of the best poetry in our language. Moreover, there was being put into their hands a potent instrument for welding into a nation this people of so many different groups.

Of course, one doesn't find hotels in the middle of Nueva Ecija and at Muñoz I have been staying in the home of the principal of the school. It has been interesting to see how our American school teachers live away off here in what was so lately a wilderness. Besides my host and his wife, and the superintendent, who has lived in the Islands for twenty years or more, there are on the teaching staff a young red-headed chap from Chicago and a girl from Georgia. This community of five has had to develop a social life of its own, for they have few chances to get up to Baguio or down to Manila and must find amusement for themselves here. They tell me that in the afternoons they gather for tea and classroom gossip and in the evenings they play bridge or read the books and months-old newspapers and magazines sent them from the States. Occasionally they go picknicking or take overnight hikes into the mountains. They all seem deeply interested in the work they are doing for the students.

The principal owes his bungalow and all its furnishings to the skill of the students. The house is much like a cottage of the States, except that it has shell windows and mahogany floors. The long veranda, densely shaded by a luxuriant vine, is one of the coolest spots I have found in the Philippines. Beyond the big living room is the dining room, where the teachers are served at meals by two Filipino boys. The men proudly displayed at the back of the house the shower bath they had made, a big tank to which is attached a garden hose. The servants

fill the tank daily, climbing up a ladder with buckets of water.

I arrived on a red-letter day, for it was marked by the completion of an electric-lighting plant to take the place of the oil lamps the teachers had been using. Everyone was proud of the new installation which had been put in with the aid of the students, nor was any one downcast when at dinne· the new lights suddenly died and we had to fall back on the hot and smelly, but nevertheless reliable, kerosene lamps. My hosts took the accident philosophically; they would straighten it out in the morning, they said. And that, I think, gives you some idea of what is behind the fine spirit among the students at Muñoz.



The Muñoz boys build their own quarters. The usual student's house has walls of woven bamboo splints and a roof of thatch and is put together without the use of a nail.

Bamboo, used by the Filipinos for house building and for making rafts, furniture, hats, and hundreds of other things, is considered also a promising source of pulp for making paper on a commercial scale.

CHAPTER XIV

HOMESTEADING IN THE PHILIPPINES

PERHAPS you have thought of the Philippines as being thickly settled. You know they have about one tenth as many people as the whole United States, scattered over an area one twenty-sixth as great, and you may have imagined a country of farms crowded together like those of Ohio, Indiana, or Illinois. The truth is that nine tenths of the land of the Philippines is uncultivated. There are tens of millions of acres in forest and jungle and vast tracts of vacant prairie land, and some of the richest islands have hardly any people. There are approximately seventy-three million acres of public lands in the archipelago, of which more than half are considered available for agriculture and suitable for the production of sugar, rice, hemp, rubber, coconuts, and tobacco.

The Philippines have a population about one fifth of that of Japan and yet they import more foodstuffs per capita. This is true notwithstanding the fact that their soil is one of the richest on earth. If the rice growers here obtained as high a yield as the average in the United States, they would be third among the rice exporters of the world. As it is, the Filipinos do not raise enough for themselves, and import one fourth of all that they eat. If their per-acre yield of corn equalled that of the United States they would have enough grain to support a pork

industry larger than that of Canada or Australia, and if their vast pasture lands were stocked with the right breeds of cattle, they might supply a large part of the meat of the Far East. Still, I have not seen a packing plant since I entered the Islands.

A professor of the Kansas Agricultural College, who has recently investigated the subject, says that we have no public lands left in the States equal to the cattle ranges of these far-away islands. He estimates that two and a half acres will feed a steer all the year round. Such pastures may now be leased from the Philippine government on long-time contracts at a few cents per acre; in the United States similar lands would sell for from twenty-five to forty-five dollars. Nevertheless, the Islands pay Australia in the neighbourhood of two million dollars a year for meat.

The chief crops raised in the Philippines are rice, sugar, hemp, coconuts, tobacco, and corn. The principal agricultural exports are sugar, tobacco, hemp, coconut oil, and copra. By improved methods alone, without the cultivation of any more land, the present production could be doubled.

Indeed, the enthusiasts about the Philippines tell me that the agricultural possibilities of the Islands are scarcely even realized. Take, for example, the rich but little-developed island of Mindanao. According to one man I have talked with, its fertile plains could raise more sugar than Cuba and more rice, corn, coconuts, hemp, and food products than all the rest of the archipelago is producing to-day. They could be made to grow tobacco as good as the world-famed product of the province of Isabella in northern Luzon. Besides all this, he maintains, they

can produce more coffee than Java, more cacao than the Gold Coast of Africa, and enough rubber to supply the entire needs of the United States.

Even allowing for the enthusiasm of those most optimistic about the possibilities of these Islands, I can say from my own observation that with adequate labour and capital, and the proper methods of cultivation, the thousands of fertile acres now lying fallow or being less than half tilled could be made to lift the Filipinos out of their poverty and place them among the well-to-do peoples of the earth.

The government is trying to encourage further settlement on the vacant lands. In my travels of the last month in northern Luzon I have had a chance to get an idea of what is going on in some of the new districts now being opened up. In the Luzon provinces of Nueva Ecija and Nueva Viscaya I have seen homesteads staked out in the woods. On the road I have met caravans of carts, their covers of bamboo basket work taking the place of the canvas which shaded the wagons of our pioneers. Each cart or so contained a family and all its worldly goods. Sometimes an extra carabao or pony, a cow or a bull, lagged on behind, and in one case I saw a family that had six dogs which my guide said they would sell for meat to the Igorots.

At midday, when all seek a shady refuge from the fierce heat, I often stopped to talk with the homesteaders. Sometimes I went with them into the jungles to look at their carabaos, which require the same rest and shade as the people themselves. I found the men ambitious, and each family inspired with the feeling that it had a fortune in sight.

I left Muñoz School some days ago and started on a

trip to the country of the Ifugaos, which lies high up in the western hills of the Mountain Province. The principal went with me for part of the way and I had much interesting talk with him about conditions in the Cagayan Valley, one of the best farming regions of the Philippines.

The road by which I entered the valley is one newly cut north and south through Luzon. It is opening up a region which exceeds in extent the Sacramento Valley of California. It is already the chief tobacco section of the Islands and has rich rice lands as well. Mountains shut it in at the south and on the east and the west, so that the valley is open for trade only on the north where it touches the sea. This is why the Cagayan River system, which drains it, is so important as a means of transporting to the markets the products of this district, and also why the new road connecting the north coast with Manila means so much for its future.

The Cagayan highway climbs about three thousand feet over a range of mountains, skirts the hills, drops into a valley, then goes over other mountains. All the way it has frequent bridges and culverts, and makes many horseshoe curves and corkscrew windings. In some places I saw men laying bridges of Philippine mahogany planks, eighteen inches wide. Here and there the Igorots were breaking stone for the road bed, and farther on they were putting in concrete culverts to carry off the mountain streams. We crossed long bamboo bridges, and sometimes clattered over pontoons of dugouts with floors of bamboo canes that rattled under the wheels of my car. There were frequent ferries where a wire cable was hitched to the boat in such a way that the current did the work of pulling us across. We had to pay toll at every

A part of the government's programme for opening new lands to homesteaders is the building of modern highways. In the Luzon mountains the Igorot road workers get wages of twenty-five cents a day.

The carabao's tough skin has comparatively few pores and so these animals must bathe at frequent intervals every day. Otherwise, they are likely to become insane and run amuck.

Along the new highways through the Luzon forests go the covered carts of the homesteaders, on their way to take up some of the thousands of fertile acres now lying idle.

ferry, but there were no toll gates on the highway or at the bridges.

Along the road there is a caretaker for every kilometer, or five eighths of a mile, who spends all his time in that stretch. He fills in the holes, digs out the grass, and daily goes over his section with a brush or a rake made of twigs. A road mender gets only seven and one half dollars a month, or twenty-five cents a day, yet his job is considered a fat one by the class to which he belongs. His calico uniform consists of a blue shirt and bright red pants, so that one can see him a mile off. These men are to be found all over the Philippines, and they do their work as well as do the road tenders of Germany and France.

As we went on with our journey, we now and then passed through villages in the valleys, little collections of thatched huts upon posts, shaded by coconut or banana groves. Even the newest of these settlements had its schoolhouse, sometimes of bamboo canes, sometimes of boards. In addition to the hundreds of substantially built wood and concrete schoolhouses, there are in the Islands more than two thousand of these rough shacks. No matter how remote, every school yard has its garden, playground, and two poles, from one of which floats the American flag and from the other the Filipino emblem. The children salute both as they come in each morning.

In one of the hamlets I saw a woman leading a three-hundred-pound hog tied with a clothes line. The line was forked at one end and both forks were knotted through holes in the pig's ears. Next to chicken, pork is the chief meat of the Philippines, and one sees pigs everywhere. Men carry them to the market, strapped to their backs, and I often see a boy with one in his arms.

As we went on farther into the wilds we came on the new lands taken up by the homesteaders. It is now about twenty years since Uncle Sam introduced our homestead policy to the Filipinos, and since then more and more of these wild lands have been taken up every year. In 1910 there were two thousand applications for homesteads, and five times as many ten years later, yet the undeveloped areas are still hardly touched. Some of the best tracts are, like the Cagayan Valley, being opened up by new roads, and, of course, every new road brings out more settlers.

The law permits any citizen of the Philippines or of the United States, who does not already own more than fifty-nine acres of land, to acquire a tract of that size. A homesteader is required to live on and cultivate his land for from two to five years, but the total fees are only ten dollars, which may be paid in instalments. The fifty-nine acres may mean comparative wealth; for once the farm is his own, the homesteader can parcel it out to tenants, and live in town upon the receipts. Rice is the chief crop in the valley where I am now, and as five acres in this grain are about as much as one man can tend, nearly every family that gets a homestead expects to rent part of it.

Those who do not wish to take up homesteads may purchase land outright. The finest of the public lands can be bought for from two to three dollars an acre. Sales are restricted to not more than 247 acres to any one person, and not more than 2,530 acres to a corporation, but both are permitted to lease an additional 2,530 acres from the government for terms of twenty-five years.

Besides its public land holdings, the Philippine govern-

ment has large estates known as the Friar Lands, formerly the property of the Catholic religious orders. As in South America, the Spanish conquerors brought with them priests who were determined to convert the islanders to Christianity. The pious brethren succeeded in establishing their church and at the same time amassed considerable property. Most of these lands were brought under a high state of cultivation. In some cases the tenants lived upon the same spot for generations and even built up well-organized towns. Many came to regard the land they worked as their own, and resisted attempts to dispossess them.

In the days of the *insurrectos* the Friars were driven off and the tenants took possession of the estates; but when we had got things quieted down again, the brothers demanded the properties which were undoubtedly legally theirs. Governor Taft finally went to Rome to consult the Pope, with the result that the Friar Lands were purchased by the Philippine government for seven million five hundred thousand dollars. At the time, it was considered scandalous that we should give for two hundred and eighty-odd thousand acres of Philippine land more than one third of the sum we had paid for the whole archipelago. They are worth to-day far more than their purchase price.

Like the public lands, the Friar Lands are sold at auction, tenants being given preference as purchasers. Any person may buy not to exceed thirty-nine acres, while a corporation may buy twenty-five hundred and thirty acres. About seventy per cent. of these lands have been sold.

In the older farming districts I have noticed that the holdings are small, the average farm being a little under

six acres, only about half of which is usually cultivated. A large proportion of them are worked by their owners. Usually these farmers are poor men, in spite of the rich soil of their fields. Their methods are extremely backward, their seeds are generally of unimproved varieties, yet, like most small farmers all over the world, the Filipinos are slow to change the ways handed down to them by their forefathers.

A man with one work animal, a carabao or an ox, can cultivate about two and a half acres. If he has a farm larger than that he must have the help of members of his family or of outside labour, which is hard to get. Again, small fields, especially in the rice districts, mean that it is impossible to use farm machinery. Each man irrigates his own plot with crude methods; modern irrigation works alone would increase the rice yield of the Philippines many times.

Another reason why the average farmer is so poor is the fact that he is often the victim of the loan shark. The Filipinos are born gamblers and not inclined to thrift. The rich man of a village, commonly known as a *cacique*, encourages the poor to borrow money from him under such conditions that the debtor and members of his family are held in debt slavery for years, and even from one generation to another.

Up until May 1, 1916, the rate of interest in the Islands was whatever the landlord or money-lender could extort and it sometimes ran to five hundred per cent. At that time a law was passed fixing the legal rate at twelve per cent. for loans on real estate and fourteen per cent. for others. But the loan shark has found ways to get around this provision. Sometimes, for example, he works in

The continued use of such primitive methods as threshing rice with carabaos keeps the Philippines from realizing their rich agricultural possibilities. If these were fully developed the Islands could support from five to ten times their present population.

The hill people who used to run in terror from motor cars, which they called "roaring devils," are now glad to get a lift along the mountain roads on board an army truck.

collusion with a lawyer, and compels the borrower to pay exorbitant fees for drawing the necessary papers. Again, the farmer will agree to pay off his loan in rice. Say he borrows $50, promising to pay for principal and interest fifty *cavans* of unhulled rice. (A *cavan* is about 116 pounds.) But when the interest comes due the debtor finds he can pay but half the rice and asks for an extension. The money-lender agrees but mentions no definite date when he will call the loan. At harvest time the rice may be worth $1 a *cavan,* but six months later the market price may be as much as $3.75. It is then that the money-lender demands payment, on threat of foreclosing the mortgage that the farmer has given on everything he possesses. He is utterly unable to meet his debt and so a new agreement is made in which the balance of twenty-five *cavans* is valued at the market rate of $3.75. Thus the farmer, who borrowed only $50 and has paid back twenty-five *cavans* of rice, is made to owe $98.75. When next harvest rolls around he may be able to pay only part of his debt in rice, another new agreement is made, and so the poor grower gets deeper and deeper into the slough.

There are other ways in which the loan shark sets his teeth in his victim. For example, a tenant draws loans and supplies from his landlord, agreeing to pay him at the end of the season in rice at less than market value. From such a transaction the landlord reaps a profit of from one hundred and fifty to two hundred per cent. Again, farmers too poor to own any livestock often rent carabaos from a landlord or a money-lender. A common trick is to rent the man an old or sickly beast likely to die on the borrower's hands, in which case he must pay the full price for the animal.

The Philppine Bureau of Agriculture is continually fighting the usurers. One of the best ways it has devised for beating them is the organization of rural coöperative credit associations of which there are now more than five hundred in the Islands. I have talked with the head of the Rural Credits Division, who believes that these associations will one day break the stranglehold the moneylenders now have on the farmers. Already more than a million dollars a year is loaned by these associations, the usual advances being small amounts at the fixed rate of ten per cent. Even this large sum, however, represents only a fraction of the business still done by the loan sharks. What is lacking now is sufficient capital to extend the good work, and this, it is hoped here, will eventually be advanced by the Philippine government.

One of the largest of the rural credit associations is made up of farmers in the neighbourhood of the Muñoz School. At the end of a few months after its incorporation this organization had driven from the district the moneylenders who had been making profits of two and three hundred per cent. in financing the rice crops. Loans are strictly limited to sums advanced for agricultural purposes, such as breaking up new rice or corn lands, or the purchase of work animals or agricultural implements.

I have been told of a loan institution in Manila of quite a different character, which the Rural Credits Division has been fighting for years. It was founded fourteen years ago with a capital of $5000; to-day it has a paid-up capital of $4,500,000. One of its advertisements lies before me. In huge letters it advises "OWN YOUR OWN HOME AND CULTIVATE THE HABIT OF THRIFT IF YOU WOULD BE HAPPY." Yet in its whole exist-

ence the association has made only one hundred and fifty-two building loans, amounting to $750,000 in all.

This institution has made its enormous profits by the practice common among loan sharks the world over of driving its clients deeper and deeper into debt, and never letting them pay off what they owe. Through special legislation, it can charge eighteen instead of twelve per cent. It can exact thirty-six per cent. a year on unpaid interest, and if the payments on a big loan are three months behind, it can auction off the mortgaged property without adequate notice. This auction may be held at ten at night, or three in the morning, or any other time the company chooses. If there are no opposition bidders the borrower is sold out at the association's own price.

Not long ago a property assessed at $27,000 was taken over for an unpaid debt of $5000, the owner not knowing until too late that it was to be auctioned. A sugar planter in the island of Negros, with a property worth $80,000, borrowed $3000 of the association, which granted the loan on its usual terms. Before he was through the man found he had signed away his sugar factory and had to bring suit to get it back.

CHAPTER XV

BY PONYBACK THROUGH THE FOREST

I WISH you could have been with me on the last lap of my journey up into the Ifugao country. At the end of the highway we took ponies and plunged into the forest. The country we went through was as wild as it was before the Malays came to the Islands and this whole region was inhabited by none but head-hunting tribes. Going into it made me feel like an explorer, and as my rat-like mount carried me up and down hill I took out my notebook and jotted down what I saw.

There were trees with silver-gray trunks eighty feet high that broke out into masses of fern-like leaves at the tops. There were great hardwoods as big around as the boiler of a locomotive with not a branch below the height of a six-story house, and there were others a hundred feet tall loaded with clusters of orchids as big as a dish pan. I remember a huge bunch of ferns shaped like a bushel basket resting upon a branch eighty feet from the ground. There were also fern trees extending four feet above my head as I sat on my pony, and giants of the banyan family with aërial roots thirty or forty feet long thrusting down toward the earth and forming great green canopies out here in the woods. Verily, "The groves were God's first temples!"

Now and then we struck a forest filled with mighty skeletons, a graveyard of white tree ghosts stretching their

bony arms into the sky. Sometimes they were half hidden by vines, and orchids, which at home would bring their weight in gold, clung to the branches. Riding through these dead trees after dusk made me shivery.

With twilight every bit of vegetation took on a new aspect, and shadowy forts, castles, and huge mounds rose here and there over the trail. I remember one combination of trees and vines that had taken the shape of a perfect cross eighty feet high. The emblem of Christ in these pagan wilds was enormously impressive to me.

As the darkness came down the fireflies made illuminations for our benefit. The lightning bugs of America are found chiefly in the swamps and do not fly high above the earth. Those of the Philippines shoot up from the ground to the tops of the highest trees. Certain species of acacias and other trees here seem to be the homes of these insects. They fly about the branches by the million, like so many shooting stars darting up and down and crosswise. It seemed to me as though the heavens had been robbed of their stars, or that all at once the forest were dotted with Christmas trees. Sometimes the acacias stood in groves, which in the pale light of the heavens gave the effect of mighty distant palaces, illuminated by spirits flying from window to window with tiny incandescent lamps.

Besides these fairy lights there were the campfires of the homesteaders or of the pagan tribesmen of the mountains. We frequently passed fires about which squatted almost nude figures of men and women cooking their meals. Sometimes these shadowy little folk got up and saluted us. I remember that one of them called out an English "Good morning" as we rode on into the darkness.

All through our ride we found plenty of life in the jungle. Occasionally monkeys jumped from branch to branch or sat in the crotches chattering as we went by. There were strange birds whose cries made me think of the laughing jackass of Australia. There were *calaos*, which have black heads and breasts, white bands under their chins, and tail feathers of dull gold. These *calaos*, which are said to cry out every day at high noon, are sometimes called hour birds. They have a Spanish name which means "the clock of the mountains." According to my guide, they give their strange call only once every hour, but each must have had his watch set on a different time, for it seemed to me they were never quiet.

Away down in a valley we saw the weaver birds robbing the rice fields. Now and then we heard the note of a wood pigeon, which has a great influence over the lives of some of the forest dwellers. They take the direction and nature of its calls as indications of good or bad luck. We watched the tree snails that climb up and lay their eggs on the leaves. The eggs are as big as rice grains, and of about the same hue.

I noticed that once in a while my guide would swab off his bare arms and legs with a soapy rag to free himself from the leeches that are a pest of the forests in this part of the world. The native would rid himself of his unwelcome guests for a time, but the minute his perspiration had washed away the soap another lot would be at him again. The creatures are only about the size of a pin when they attach themselves to their victim, but swell out enormously as they proceed with their bloodsucking. Their bite is neither poisonous nor painful, and often one does not realize that he is attacked until he feels his skin

wet with blood. I have seen natives gather bunches of leeches as big as a baby's fist from under their armpits where the pests had clustered for a feast. I knew from past experience in these and other tropical jungles the need to protect myself, and my secretary and I had reduced the exposure of bare skin to the minimum, even assuring ourselves that there was no way for leeches to get in through the eyelets in our shoes.

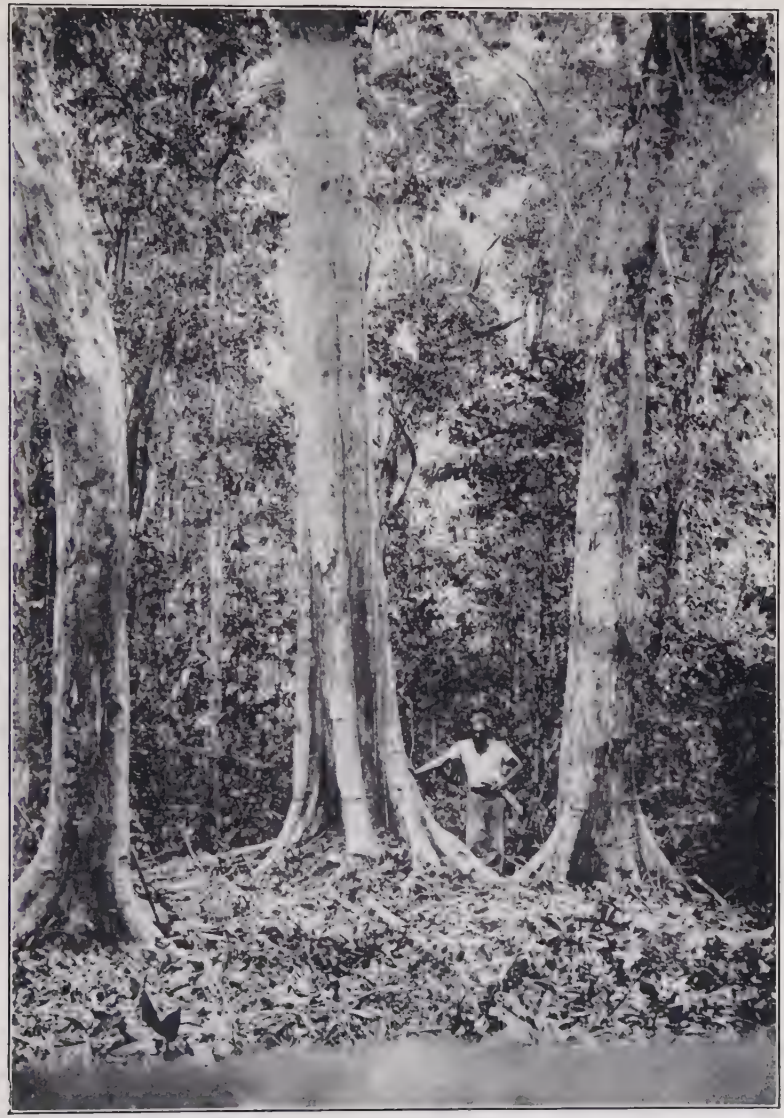
Once I saw hanging to a tree a kind of bag of a thin, whitish membrane. I was most careful not to brush against it as I passed, for I knew it was filled with ants which would have swarmed out upon me had I touched their home. Ants are the common nuisance of the Philippines. There are many species, ranging from tiny creatures the size of a pinhead to big fellows half an inch long. One variety seems to work in gangs, attacking a bush and stripping it bare of leaves in a short time. They cut the leaves, not for food, but as a fertilizer for a kind of mushroom which they raise in their underground homes and feed to their young.

Worst of all are the termites, which are commonly known as wood-eating or white ants, though strictly speaking, they are not ants at all. While I was in Manila I heard of a package containing a dozen rolling pins which had just come in from abroad. When the box was opened, lo and behold, there were just two rolling pins lying in a pile of white dust. When the pins were picked up one of them broke in two and the other dropped into pieces. The white ants had liked the flavour of the wood and had made a splendid feast. These ants sometimes attack warehouses, getting in their work so secretly that the extent of the damage is not realized until a slight earth-

quake shock brings the building to the ground. They are apparently fond of mucilage and paste, for they eat the labels off bottles and even attack corks. Not long ago a doctor in a Manila hospital opened a case of alcohol and found that the bottles were only half full. He discovered that the ants had honeycombed the cork and that the liquid had evaporated. There was not a sign on the outside of the box to show it had been touched. The ants had made a very small hole and crept through one at a time. The termites usually do their work on the inside of the wood, leaving the surface untouched. They may eat the legs of a chair, leaving little more than the paint, so that when you sit down you find the legs go to dust and you yourself get a spill on the floor. They will eat clothing and pasteboard cartridge wrappings, and it is even said they sometimes attack iron, though this I doubt.

The plants and flowers of the Philippine wilds are of many varieties. There is a sensitive bush which grows here in hedges, its bunches running along the ground to the height of your waist. If you touch a leaf the ends will spring together like the jaws of a steel trap, or if you touch the root the whole plant will double up its leaves. The leaves of some of the trees are of gorgeous hues, making mighty bouquets fifty feet from the ground. Even the vines are of different colours. The orchids are of many varieties, and the lianas, which sway back and forth like curtains, are wonderfully beautiful.

There is one ugly white plant which some of the natives call the "ungrateful tree." It starts as a vine up in the branches of another tree and sends its aërial roots down toward the ground. It is unlike a parasite in that it draws none of its sustenance from the tree which it uses as a



It is estimated that there are forty thousand square miles of virgin forests in the Philippines. About three fourths of the trees belong to the lauan family, which furnishes many fine woods for building purposes and furniture making.

Although standing timber is the greatest natural resource in the Islands, the lumbering industry has been but little developed, the methods used in cutting the logs and getting them out of the forest being crude and expensive.

means of getting its roots into the earth. As it grows it wraps itself around the tree, embracing it more and more amorously as it works its way downward. Once in touch with the soil the tendrils take root and the vine now begins to grip the tree in its deadly clutch. It is like an octopus or a mighty boa constrictor closing in on the captive tree that has supported it. Drawing no life for itself from the tree, it yet shuts out the light until finally the tree dies and rots away. As the twining stems of the strangling fig, as it is called, continue to grow about the dead tree they interlace and sometimes grow together so that they look like a solid tree trunk. I have seen many of these strangling figs, regular giants of vegetation, their branches almost lost in the sky, and their trunks enclosing hollows where the suffocated supporting tree once grew.

Standing timber is the greatest and most valuable natural resource of the Philippines. Undoubtedly all the Islands were once as thickly wooded as was Samar when Magellan first sighted it. To-day about one third of the total area of the archipelago is still clothed in virgin forests, which cover forty thousand square miles, or an area almost exactly that of the State of Kentucky. In addition, there are about twenty thousand square miles of more or less scattering, cut-over, and second-growth forests. The commercial timber lands are in Luzon, Mindoro, Samar, Leyte, Negros, Mindanao, and Palawan.

Nearly three fourths of the trees of the Philippine forests belong to the lauan family, which yield excellent woods for furniture and buildings. The red lauan, which is known as Philippine mahogany, is being imported in increasing quantities into the United States. The outside planks of the old Philippine-Mexican galleons were of

lauan wood, used because it would not split when hit by the cannon shot of those days.

Next in importance to the lauan family are the members of the narra, or locust family. To this belong a number of commercially important cabinet woods. One of these is acle, which resembles black walnut in colour and has a pungent peppery odour, so that when it is cut up in the mills the sawdust from it causes violent sneezing. Another is tindalo, which is a gorgeous deep orange-red, growing richer in colouring as it ages. No finer hard woods than these are to be found anywhere in the world.

The natives give to molave the name of "Queen of the Woods." This is perhaps the best known of the hard, heavy, and durable timbers of the Philippines. It is impervious to sea-worms and white ants and is put to almost every conceivable use for building as well as for railway ties, agricultural implements, and high-grade furniture.

In speaking of the forest wealth of the Philippines, I should include also the mangrove swamps, which cover more than a million acres on tidal flats along the sea coasts. They furnish firewood, charcoal, tan and dye barks, and some building woods. One of the latter is pagatpat, which resists the sea-borers and is used for piles, ties, paving blocks, and in general construction. Copper nails and screws must be used with it, for the tree absorbs so much salt from the water in which it grows that iron nails and screws rust out rapidly in it.

In the mangrove swamps, or "mangles," as they are called, grows also the nipa. From the economic standpoint, this is the most important of the Philippine palms. Except in regions far back from the coast nipa leaves are the universal thatching material, while they are frequently

used for the walls of houses. In Pampanga Province I have often seen women making nipa shingles, sewing the small leaves on a slender piece of bamboo so that they will overlap and form a shingle about twenty-five inches long. Some of the women make as many as eight hundred of these in a day.

Nipa sap is said to be the cheapest raw material known for making alcohol. From it is distilled more than three fourths of the proof alcohol produced in the Islands. A cut is made in the stalk just below the flower and a bamboo joint is hung beneath the gash for collecting the sap, which may flow for three months or more. At one of the world's fairs nipa alcohol was awarded first prize for purity. The fermented juice, known as tuba, is drunk by the natives as a beverage.

When nipa sap is fresh it contains about fifteen per cent. of sugar. I understand that investigations of the Philippine Bureau of Science have shown that nipa sugar is equal to cane sugar. It can be extracted more cheaply, since no crushing machinery has to be used. According to the Bureau's estimates, two and a half acres of nipa will produce about twenty-three thousand pounds of sugar, worth at current sugar prices more than eight hundred dollars. Some sugar is being manufactured from the sap and is sold locally, though there is as yet no important nipa sugar industry in the Islands.

The Philippine forests are rich in other jungle products, among them rattans, gathered by the natives and sold to the furniture makers of the towns; almaciga gum, which is used locally for making incense and is exported in considerable quantities to varnish makers; and patchouli, whose dried leaves give such a characteristic scent to

oriental shawls and other goods and the oil of which is employed by the perfume makers. I have been told that though patchouli grows in other parts of the Orient, it flowers only in the Philippines. Here, too, grows the ilang-ilang, sometimes called the "flower of flowers." The blossoms are gathered at night and delivered to the distilleries next morning before they have had time to lose their freshness. The oil from the Philippine ilang-ilang, which is used in the preparation of high-grade perfumes, such as lily of the valley and heliotrope, is of the finest quality known in the market.

It may be that the Philippine forests will help to relieve the increasing paper shortage in the United States. Great areas are covered with bamboo, the tree of a thousand-and-one uses, one variety of which has been found suitable for paper pulp. Other possible sources are the *cogon* and the *talahib* grasses, which spring up on deforested or uncultivated lands. About forty per cent. of the area of the Islands is now covered with this rank growth. To encourage the paper pulp industry, the Philippine legislature has passed a law guaranteeing a four-per-cent. return for from three to six years to any company that puts up a suitable plant for using these materials. Besides the market for paper pulp in the Philippines and the United States, there is an ever-increasing demand for paper in China and Japan. As it is, the Philippines import their paper.

In Manila I talked with one of the officials of the Bureau of Forestry, which controls more than ninety-nine per cent. of the forest lands of the Philippines. Lumbering is encouraged, but strictly regulated through a licensing system. When I asked him what he thought of the future for lumbering in the Islands he promptly replied

that he thought it was very bright indeed. He spoke of the markets close by in Japan and China and then went on to tell of the development that has taken place here since the Americans came in.

"In 1900," said he, "there were in the whole archipelago but three steam saw-mills, none of them with a large capacity. Now there are ten great steam mills equipped with the best modern machinery and thirty smaller ones, all bigger than those of 1900. When we came in there was no lumber exported from the Islands and a good deal was imported. In a recent five-year period, the annual imports of lumber dropped from above $230,000 to just under $60,000 worth, while the value of the exports rose from $325,000 to more than $830,000. The amount invested in the lumber business in the Islands is more than $750,000 and the annual production is about 100,000,000 board feet. It is estimated that the forests of the Philippines could, without injury to them, yield ten or twelve times as much as they do now."

CHAPTER XVI

THE RICE TERRACES OF IFUGAOLAND

SIT down at your radio, put on the ear phones, and tune in. If your set can catch the sound waves from halfway around the globe you can hear me as I speak in Kiangan in the mountains of northern Luzon. If you live in New York or Boston we are separated by ten thousand miles of travel, to say nothing of centuries of civilization. Lofty buildings reared on steel ribs tower above you, spirit-driven motors whir past, elevated and electric cars clatter by, and beneath you subway trains roar as they go burrowing under the earth. What triumphs of civilized man's skill surround you! As for me, I am in the wilds of the Philippines, in the capital of a land of so-called savages. And yet all about me are works of engineering, the like of which you in the States cannot show.

In the valley of the Nile I have studied the marvellous achievements of the ancient farmers. I have travelled in the footsteps of the Incas of Peru, whose subjects carried up earth on their backs and made irrigated farms high on the slopes of the Andes, but my wildest imagination has never conceived the possibility of the rice terraces built by these half-naked, head-hunting Ifugaos.

Imagine whole mountains, as rough as the vomiting volcanoes and flooding rains of centuries can make them, cut into a series of flat shelves that rise steeply from the

valleys almost to the skies. Let each shelf be covered with rice plants as green as so many emeralds peeping out of beds of silvery water. Let each one be walled in with stone and earth, the wall in some cases being a foot or more thick and as high as a six-story building. Let these shelves extend, like a series of giant steps, up one side of the mountain and down the other, completely encircling every peak. Now water them with rivulets not as big around as your leg. Then you may have a faint idea of what the Ifugaos have done with their mountain land throughout an area equal to three thousand 160-acre farms.

It is difficult to give you an adequate appreciation of the extent of this terracing, which covers the whole Ifugao country. If the walls supporting the embankments were placed end to end they would be eight times as long as the Great Wall of China. They would reach from where I am writing across the Pacific, across the United States to the Atlantic, and over that ocean to England. They would extend for more than twelve thousand miles, or almost half-way around the world. This is the estimate of Dr. Beyer, whose Philippine studies I have already mentioned.

Think of walls of boulders and earth, some of them fifty feet high, holding in the semi-circular pools of water and mud in which the rice crop is grown. Realize, moreover, that they were so well built that they have lasted for generations, though it takes a vast deal of skill and hard labour to keep them in repair. You will see that they must have been correctly constructed, for without knowledge of engineering principles, how could any one erect a wall, even no higher than your ceiling, that will so sustain a miniature lake that just the right quantity of the water

turned in can be used and the surplus passed on to the terraces below? These terraces are so skilfully made that not a drop of water that falls on the mountainside is allowed to run to waste, and even the tiniest streams are utilized to irrigate the tiers of rice patches. Water is fed to them through an elaborate system of canals and ditches, some of the canals being several miles long.

All these wonderful creations of half-naked pagans lie in a world of their own. To realize just how remote it is you should have been with me on the trip I made to get here. I came from the other side of the mountains, travelling many miles in a motor car, going through wild passes, climbing up one range and down another, crossing valleys of virgin land just opened to homesteaders, now fording one river, and now being ferried over another, and again crossing a third on pontoon bridges of bamboo-canes laid on dugouts cut from the forest. I have told how when the road became too rough for the automobile I took ponies, and travelled through the forest far into the night. Two nights I spent in rest houses out in the wilds. To-day I have been travelling up over the mountain, now on a Filipino pony and now in a chair borne on the heads of four Ifugaos. My seat was often tilted at an angle of forty-five degrees as the bearers toiled up the rough roads.

I have spent some time examining the rice terraces closely. I have walked on the narrow walls supporting them, sometimes missing my step and sinking halfway to my knees in the oozy mixture of water and mud; I have sat down and watched the men and women at work in the rice. The grain grows in bunches in the water. Here and there it rises above the walls, but in some places the green tips are just thrusting up above the platinum-like surface of

On the steep slopes of their mountainous country the Ifugaos have built a wonderful series of rice terraces that are among the world's great engineering works. They are held in position by stone retaining walls, so well constructed that they have lasted for centuries.

The Ifugaos live in groups of huts, usually on patches of land that cannot be irrigated for rice growing. At night the family chickens are shut up safe from rats in the wicker cages hung beneath the houses.

the water. Everything is clean and the weeds and grass have been pulled out from the cracks in the walls.

All the vast toil on the rice terraces is spade and hand work. It is impossible to use a pony or carabao to plough or cultivate these little patches, and, as for a tractor, you might as well try to run a locomotive through quicksand as to employ anything worked with a gasoline motor in this morass of terraced farms. There are coves in the hills where the fields are of respectable size, but for the most part the rice grows in narrow patches hardly ten feet wide, each patch being walled in front and at the sides as I have described. Perhaps no other people in the world have made such heroic efforts as the Ifugaos to raise their own food. Possessing almost no level land, they have built and irrigated these shelf-like fields on the mountainsides. Men who have studied these people say that twice they gave up the struggle and went to the lowlands, but each time were driven back to the mountains by epidemics of disease that nearly exterminated them.

All about me as I write are the people who have constructed these wonderful works, who have owned them for untold generations, and who to-day depend chiefly upon them for a livelihood. I have seen much of the Ifugaos in my travels through these mountains. They are of a rich mahogany colour, with black hair, dark eyes, aquiline noses, thin lips, and fairly good features. I can study their forms, for most of the men are dressed only in gee strings, and the skirts of the women are tight around their legs. The hair of the men is cut short so that it stands up like brush bristles all over the head, being bound in with a rope around the forehead. The women wear their

hair down their backs, confining it in a band. They are usually clad in jackets and skirts, but the jacket is sometimes left off, and the only decoration above the waist may be a scattered coat of tattooing and coils of brass around the forearm from wrist to elbow. Here in Kiangan most of the men wear loose flapping shirts, and all except the soldiers are barefooted, barelegged, and bareheaded. The schoolboys wear shirts but no trousers.

The rest house where I stayed last night was kept by an Ifugao and his wife, who are typical of the race. Bruno was a full head shorter than I, and his wife's head reached only to his ears. The woman was pretty and had the small hands and feet that are characteristic of all these tribesmen. They are not unattractive, and show a considerable degree of intelligence.

The Ifugaos are the largest pagan group of the Philippines. They number about one hundred and thirty-five thousand, or perhaps half as many as the savages who, at the coming of Columbus, roamed the lands now comprising the United States. But these people have a higher degree of civilization than any North American Indian tribe possessed at that time. They live according to established laws and customs, and they have traditions and folklore that it would take volumes to relate.

The Ifugao looks upon the Filipinos as being out of sympathy with him and his laws. Dr. Roy Barton, who lived eight years with them at Kiangan studying their customs and traditions, tells me that they had a well-developed system of laws under which they got along without trouble before a foreign government was established among them. They never submitted to the colonial rule of Spain and for years after the Americans came would

ambush our soldiers or Filipinos who ventured among them, fearing that the outsider came to their country for the purpose of subduing them. For hundreds of years they have clung to their ancient creed and code, notwithstanding the fact that they have no form of writing, and their laws have all come down by word of mouth. Consequently, they have developed wonderful memories. Dr. Barton says that many of them know the names of their ancestors for from ten to fourteen generations, and some can recite also the names of the brothers and sisters of these ancestors. The Ifugaos have no tradition of having ever migrated, but it is thought that they are a fusion of the Indo-Malay tribes who pushed their way north centuries before Magellan came to the Philippines. Some believe that their original home was in the highlands of Burma, and it is generally conceded that they are Malays.

The Ifugaos have a thirteen-month calendar. Where and when this originated no one knows, yet for uncounted generations this method of reckoning time has been handed down among their clans. Each of the sixty clans has its *tumunoh*, a wise and learned man who keeps the calendar reckoning, tells the people when to plant and when to harvest their rice, and brings up an apprentice to take over his high office when he passes on to the spirit world. The *tumunoh* is so important to the clan that he may not take part in tribal disputes or fights, neither must he engage in heavy physical labour. At times of danger he must seek refuge in a protected place along with the women and children.

On the first day of the Ifugao year, which is about the middle of July, the *tumunoh* ties a knot in a new calendar

string. Each day a knot is added until there are twenty-eight. That string is then put away, and another started for the second month. Thirteen knotted strings constitute a year and when so many have been collected they are tied in a bundle and stored in the *tumunoh's* house. Some of the *tumunoh* houses contain hundreds of bundles, thus giving an idea of how long these tribesmen have reckoned time in this way.

The wise men know quite well that under their calendar a day is left over annually. They put this day in the middle of a great three-day holiday at the end of the year. No work is done during this period and there is a great stillness among the people, for it is then, they believe, that the spirits of the dead return to earth and unless they find peace and quiet reigning here they will not go back to their heavenly abodes.

The Ifugaos are divided into different social grades, each of which is based to a large extent on the wealth of its members and the feasts they have given the people. They have clans that are in some respects like those of old Scotland, and nobles who have their serfs and dependents. The nobles are known as *kadangyangs*. To get their rank they give the clan a feast which often costs the equivalent of several hundred dollars. On such an occasion the host takes his guests out and shows them the rice stored away in his granary. If the amount is deemed sufficient to prove his riches he gets his title, and enjoys special rights thereafter. Within certain limits these rights are passed on for one or two generations.

The richer a *kadangyang* the more feasts he must give. He is so proud of his banquets that he keeps a record of them by taking the skulls of the water-buffaloes and other

animals sacrificed for his barbecues and nailing them to the underpinning of his house. They are his coat of arms, or patent of nobility, as it were. In former times, among these trophies were always to be seen the skulls of the men whom the noble had killed as a head-hunter. Every head he took was supposed to benefit the tribe, for it was believed that these trophies brought prosperity. By government orders, human skulls no longer grin beneath the Ifugao huts, and if a man secretly takes a head he hardly dares to exhibit it.

Below the upper class there is a second or middle class, called the *natmoks*, who have just about enough rice land to support them. They are dependent upon the *kadangyangs* in that the latter will supply them with food if their rice crop runs short; but at harvest they must pay this back in kind with two hundred per cent. interest.

The people of the third and lowest class have no rice fields, but work the farms of the more fortunate, pulling their belts the tighter if famine comes on. Besides these classes there used to be slaves, though the government has about wiped out slavery. For a long time this town of Kiangan was the leading slave market of Ifugaoland, and there was a lucrative business in supplying slaves to the Christian people of the adjoining provinces. The women and children of a man killed by the head-hunters were often sold and the hope of making a good thing of the sale of the families of victims was an added incentive for head-hunting.

The Ifugaos live in little groups of huts scattered among the rice fields, usually on the tops of hills or other spots that cannot be irrigated. There may be a dozen homes in one settlement, each consisting of a hut on posts as high

as your shoulder, and each occupied by one family. The typical Ifugao home is about fifteen feet square, and perhaps ten feet in height, with a roof of thick thatch extending out over the four sides. These houses are like great baskets with grass covers resting on four corner posts. The posts have knobs at the top cut in such a way that the rats attempting to climb up cannot get around the projections and must fall to the ground. Some of our farmers accomplish the same result by nailing inverted tin wash basins or pie-pans to the posts of their corncribs. Hanging to the posts and to the poles that support the floor of the house is a fringe of bamboo baskets, each about as big as a half bushel measure. These are chicken coops, in which the family poultry roosts at night out of reach of rats. A single household may have twenty coops all filled with chickens. The doors are kept open until darkness comes on, when a little grain inside brings the fouls flying to their bedrooms.

To get into his home the Ifugao climbs a ladder. Within, about the only furniture is a shelf of bamboo that sometimes serves as a bed, but is more often used to store the few clothes and other belongings of the family. The floor is of bamboo canes so loosely laid that dirt and rubbish fall through between them. The stove is a fire box filled with earth, and the cooking bowls are set above the fire on stones.

There were twenty or more Ifugaos squatting in front of their houses when I visited one of their hamlets this afternoon with an officer of the Philippine Constabulary. They were good-looking people, and in the few words we had with them displayed, I thought, considerable intelligence. In their schools some have made fine records

and not a few of the boys are now attending the farm schools and colleges. The tribesmen have given up the practice of head-hunting, and I understand that it is years since a head has been taken in Ifugaoland. There is no doubt that they will make good citizens, but they must be carefully handled with due regard for their beliefs and what they consider their rights.

Their capital town of Kiangan is a prosperous settlement in the very heart of the rice terraces. It has a first-class hospital, two or three stores, a stone building housing the provincial government offices, and a first-class post for the Constabulary stationed here. Nearly all the men in this detachment are Ifugaos, and crimes are comparatively infrequent among these people. There is a big stone schoolhouse built by the Ifugao boys themselves. The children speak the kind of English they have learned in the schools, and on the whole they show much advancement.

CHAPTER XVII

WHERE MAGELLAN RAISED THE FLAG OF SPAIN

I AM travelling in the route of Magellan, the Portuguese navigator who was the first European to visit the Philippines. My steamer is anchored in the harbour of Cebu, chief port of the island of that name, and near the exact spot where, after his long trip across the Pacific, he established his command on Philippine soil. Within a few yards of where I am writing stands a little brick pavilion about twenty feet in diameter and fifteen feet high. In the centre of it is a great black cross of wood marking the place where four hundred years ago Magellan heard his first mass on the island of Cebu. To this day it is considered sacred ground by the Filipinos.

As a sign of their veneration for the great discoverer, the people throw coins through the bars of the gates by which the pavilion is entered, and the brick floor is peppered with coppers, with here and there a silver ten- or twenty-centavo piece. Candles are always kept burning in front of the cross, and as I looked at it the candle sellers, old women who sit or lie on bamboo beds about the shrine all day, gathered around me. Wishing to add my tribute to the memory of Magellan, I bought and lighted two candles which I daresay have by this time burned almost to the floor. Or perhaps they have been blown down by the breeze from the ocean, and joined the great assemblage

"Bruno and his wife, the caretakers in the government rest house where I stopped overnight, are typical Ifugaos, being short and wiry, with small hands and feet. The Ifugaos have a legalized form of trial marriage."

In a pavilion in the town of Cebu a big black cross marks the spot where four centuries ago Magellan heard mass. On the island of Mactan close by he met his death.

of other partly burned candles that, like so many corn cobs, are scattered there amid the coins.

The cross is twelve feet high and reaches almost to the top of the pavilion. It is hollow, and inside it is said to be the selfsame cross that was set up here by Magellan. The superstitious say that it is growing, but to my eyes it is only pieces of wood painted black, set in a concrete foundation, and as dead as Magellan himself.

The cross stands in the plaza of Cebu. Within a few steps of it is the Church of St. Augustine, a stone structure that houses another relic of Ferdinand the famous. This is the black wooden image of the child Jesus, which he carried with him on all his voyages. It was left behind when he was killed fighting savages on the neighbouring island of Mactan, and when the great Legaspi came about forty years later he found it in the hands of a native. Now the sacristan of the old church reverently exhibits this "Holy Child of Cebu," attired in robes of richly embroidered silk and decked out in jewels. It is the most sacred relic in all the Islands.

Legaspi selected the site of the fortification Magellan had erected in his day as the place for the first Spanish settlement in the archipelago. For some years it was called "City of the Most Holy Name of Jesus" and was the capital of the colony. Thus Cebu was established seventy years before Boston was founded, and forty-two years before Captain John Smith set up his little colony at Jamestown. Its Calle Colon, now all arcades and tiles, is the oldest street in the Philippines. Where Magellan's crude fortress stood, the ancient three-cornered Spanish fort of San Pedro now commands the harbour.

This morning when I sailed up to the shore of Cebu in

the transport *Alba*, I tried to imagine myself in the place of Magellan. My ship, which registers thirteen hundred tons, is an old coasting vessel plying from Manila by way of Cebu to Negros, Mindanao, and Jolo, and gathering up coconuts, hemp, sugar, and other products. It is less than one fortieth as big as the *Majestic*, in which I crossed the Atlantic to France two years ago, but it is, I venture, ten times the size of the *Trinidad*, the flagship that led Magellan's squadron out from Spain to discover a new way to Asia and the islands of spices. As I remember, the flagship of Columbus was but ninety tons, and it is hardly possible that that of Magellan, setting sail only thirty-seven years later, could have been more than one hundred and thirty.

And what a wonderful voyage was that of Magellan! Starting out in 1519 in his five sailing ships from Spain he braved the terrors of the Atlantic and crossed to South America. Heading south along the coast and passing the mouth of the Rio de la Plata, he came at length upon the strait that now bears his name. In this part of his trip he crushed a mutiny, lost one of his ships, and had the grief of seeing another desert him and turn back to Spain. But the great voyager kept on into the Pacific and after a year and four months at sea, on the sixteenth of March, 1521, caught sight of this wonderful archipelago. Little did he dream that death awaited him here.

The first land Magellan saw was Samar, a wooded island about the size of Connecticut. He sailed from there south around the island of Leyte, and passing between it and Bohol, came down the coast of Cebu. This island, nearly as big as Rhode Island, is shaped somewhat like a cigar, coming to a point at each end and being fat in the

middle. It lies about one hundred and seventy miles southeast of Manila, at the southern end of the cluster of islands between Luzon and Mindanao. The brave mariner landed here where the little island of Mactan almost touches Cebu.

Pigafetta, one of Magellan's men, kept a record of the voyage and set down all its adventures. He tells how they first saw natives on Samar, from which a chief came out in a boat and took a meal with the captain-general. After this the natives were presented with combs, bells, and ivory, and some red caps and looking glasses. In return, they gave the Spaniards fish, a vessel filled with palm wine, probably the intoxicating *tuba* drunk to-day in Cebu, and some "figs" more than a foot long, which we now know were bananas. Magellan fired the little cannon he had brought with him, and the explosion so terrified his visitors that they started to jump off the ship into the sea. The next landing was on the little island of Limasawa, south of Leyte, where the king and Magellan became so friendly that the voyager presented the monarch with a robe of red and yellow and a red cap. The two swore eternal friendship, and solemnized their pact by drinking blood that each drew from the arms and breasts of the other.

Leaving Limasawa, Magellan came on to Cebu, where his cannon fire once more frightened the natives. He sent word to the chief that his mission was friendly, and that he was in need of provisions. To this Rajah Humabon, who was probably an old Moro pirate, replied that all boats arriving in his territory had to pay tribute and suggested that Magellan do likewise. He intimated, moreover, that he had two thousand armed followers to

back up his demands. Magellan answered that the King of Spain was a much greater monarch than the Rajah and would not pay tribute to any sovereign on earth. He said that if the King of Cebu wanted peace he could have it; but if he wanted war the Spaniards were ready to fight. The Rajah then asked if Magellan were demanding tribute, and Magellan said he was not. Thereupon the two went through the blood brotherhood ceremony, and Magellan rewarded the Rajah with two gilt glasses, a silver dish, and a robe of yellow silk trimmed with violet. In return, the chieftain supplied the Spaniards with provisions, and within a short time relations became so friendly that the Rajah, his wife, and eight hundred of his followers accepted the Christian religion. They probably attended mass in the place that I have described. It was to the Rajah's wife that Magellan presented the little wooden Jesus.

But Magellan was not satisfied with a little Pentecost of only eight hundred souls. He wanted to Christianize all the natives, so when the King of Mactan over the way sent word that he was not willing to become subject to a stranger ruler, or to worship new gods, the captain-general took sixty Spaniards and one thousand Cebuans and prepared to seize the island and raise the cross there. He left Cebu with his army not long after midnight, and as the sun came up on April 27, 1521, he faced the enemy. Anxious to show the potency of the Spanish weapons, he told Rajah Humabon to keep his Cebuan warriors in his boats while the Spanish demonstrated how they did things in Europe. The Spaniards, finding it difficult to land, waded ashore. They were attacked by thousands of natives and were soon surrounded. Magellan ordered a

retreat. The natives came on in still greater numbers, brandishing their lances of well-sharpened bamboo. One of them thrust his lance in the face of the captain. Whether the weapon succeeded in piercing the leader's brass helmet —for a story is now current that Magellan then wore a helmet which has recently been discovered, I do not know, but Magellan retaliated by driving his lance into the Filipino's breast with such force that he could not pull it out. He then tried to draw his sword, but he had been wounded in his right arm and had got his weapon only half out of the scabbard when several natives were upon him. A blow on the left leg threw him on his face, and the savages stabbed him with their lances and cut him with their krises and other weapons until, in the words of Pigafetta,

> they had deprived of life our mirror, our light, our comfort, our guide.

Shortly after this the remainder of Magellan's forces burned two of the three ships left of Magellan's little fleet and departed in the *Victoria* sailing south to the Moluccas, where they loaded with spices. Through many trials they made their way back to Spain, via the Indian Ocean, the Cape of Good Hope, and the Atlantic. Thus was completed the first voyage around the globe.

As I remembered these old chronicles of Pigafetta, I could not help thinking how surprised the great navigator would be if he could now be raised from the dead and brought back into Cebu with the same active mind he had when he landed here four centuries ago. Seeing these, to him, mighty steamers moving along without sails would perhaps startle him more than his cannon frightened the savages. He would not understand the motor boats chugging back and forth in the harbour, and the automo-

biles flying over the roads would seem gigantic, miraculous bugs on the run. He would want to know the meaning of the great radio towers that stand on the shore above the city, and I venture to say he would have to be blindfolded before he could be made to board the train that now stands with puffing engine before the Cebu station. He would ask about the telegraph and telephone wires, and in his eyes the city electric lights would seem like magic.

The idea that seventy thousand people, descendants of the savages whom he more than half despised, could have roads better than those of Spain, and that the wares in their stores could surpass those sold in Seville would be amazing to him. He would not understand the educational institutions, for the city of Cebu has all kinds of schools, from the primary grades to a new normal college. He would be astonished at the trade of these islands, and at the great factory for making oil from coconuts. How strange that a big industry should have grown up in handling hard, shaggy brown balls like those presented to him by the island chieftains! In fact, his head would go round like a top. If he could be guided to the Church of St. Augustine and shown the little black wooden image of Jesus, he would doubtless drop on his knees and ask the good Lord to tell him if all this was not just a dream.

Cebu is already next to Manila in importance and trade. It is one of the chief Manila hemp centres, exporting the fibre in some years to the value of more than twelve million pesos, and it has a large trade in coconuts and coconut oil. Its commanding location in relation to the southern half of the archipelago is largely responsible for its rapid rise.

One of the industries of Cebu is that of obtaining salt

from the sea water. There are acres of salt beds along the shore just opposite Mactan, from which are taken hundreds of thousands of pounds of salt every year. I have visited these beds during my stay. They are floored with red building bricks as smooth as if they were glazed, and so closely laid together that the salt water cannot seep through. Ten acres are so paved and divided up into little ten-foot squares by wooden walls four inches high. The brick floor of each pen slopes from the centre toward the walls. Sea water is let in to form shallow pools, and is rapidly evaporated by the hot sun. The moist crystals left in the beds are swept up by barefooted women using rude brooms and bamboo scoops. Despite the broiling heat these women work bareheaded, but their hours are short, usually from three to six o'clock in the afternoon. Their wages are three cents an hour. I shouldn't wonder if the great-grandmothers of these women were getting out salt in much the same crude way when Magellan was here.

This afternoon I went to Mactan to stand on the spot where the bold navigator was killed. The island is so small that you cannot find it on most of the maps, and the strait between it and Cebu is so narrow that when the tide was out I was able to cross in the space of ten minutes in a sail boat, a sort of catamaran, with two great bamboo outriggers lying on the water on each side to keep it from turning over. This crossing was made from a little town five miles or so from the city of Cebu. The boat lay far out from the shore, and at first I could not see how we were to get aboard. But the little brown-skinned sailors, who were naked except for shirts and short trunks, jumped out into the water and wading ashore, picked up me and my secretary, and carried us out to the boat on their shoul-

ders. My secretary is a six-footer and weighs one hundred and seventy pounds, so I fairly trembled as I saw him on the back of an eighty-pound, four-foot-six Filipino, swaying this way and that and within a foot of a ducking.

Landing at Mactan, we got a motor and drove up the coast to the place where in a shady grove of coconut palms rises a white monument in memory of Magellan. A Spanish governor put it up in 1866 but it had been allowed to fall into decay until some years ago an American merchant living at Cebu restored it at his own expense. It seems to me that the Philippine government should be proud to look after this modest monument to the world's greatest navigator.

It is pleasant to be afloat again in Philippine waters. Cebu is my first stop since leaving Manila and I look forward to many days at sea as we wind in and out among the islands of the archipelago. I shall go ashore frequently, but shall live on the *Alba*, where the accommodations are far ahead of those I could command in most of the places where we shall put in.

Mention of my fellow-travellers will give you an idea of life in the Philippines and the sort of people one meets in going about among the Islands. Among them are: two American teachers, a man and his wife, returning from a vacation at Baguio to their post at the Indanan School in the island of Jolo; two army officers reporting for duty in Mindanao; a member of our Geodetic and Coast Survey coming out from Washington to relieve a fellow-officer on board the survey ship stationed in these waters; a rubber planter bound for Basilan Island; a retail shoe dealer of Manila, and the proprietor of a big desiccated coconut factory in Zamboanga. Travelling second class are many

Though Cebu is the second city of the Philippines and does a big business in handling hemp, copra, and coconut oil, it still has an old-fashioned air and the ancient, solid-wheeled cart does not look odd in its streets.

The Filipinos are great inshore fishermen, using traps and nets for their catch. The typical small fishing boat is equipped with bamboo outriggers, which help balance the tiny craft when under sail.

Filipino men and women, fat Spanish women, and Chinese traders going to open little shops in Zamboanga, Davao, and other towns of the southern islands. Our captain is a Spaniard, who speaks not one word of English. At meals we sit at long tables on deck and are served by Filipino waiters. After the nine-course dinner in the evening there may be a languid game or so of bridge, but pretty soon the card players give way before the pajama-clad passengers having their cots brought up on deck to escape the sweltering heat of the cabins.

I cannot say the *Alba* is exactly a floating palace of the deep. I have the best room on the boat, a double cabin at the prow, but it is alive with tiny ants, which not only eat the wood-work but attack me with teeth of fire. I have had the cabin boy sprinkling the beds with gasoline and dusting the place with insect powder, which I have laid in by the pound. I get what comfort I can from the statement of a fellow-passenger that these pests are the enemies of bedbugs, which they are said to eat. At any rate, I have seen none of these latter disturbers of the peace since I came to the Islands.

Ants and all, however, the *Alba* is luxury itself compared with the quarters I had when I sailed these seas before. Then I cruised on the *Port Stephens*, which carried a valuable cargo of five hundred army mules. Although I was warned that there were plenty of comforts for the mules but none for the passengers, since that boat was the only means of reaching our military posts and getting the material I thought I must have, on board I went. I rigged up a cot on deck and at night rolled myself in a blanket and slept out under the stars with the sound of the stamping and braying of the mules to lull me to rest. I had my

bath from a bucket of salt water on deck, ate good meals with the captain, and wrote on a table I had set up at the stern of the ship. It was not at all bad, and I think maybe I got more pleasure out of roughing it on the mule ship than I have ever had in the palatial suites of luxurious liners.

CHAPTER XVIII

COCONUT FARMS

Oh, the green and the graceful—the coconut tree!
The lone and the lofty—it loves like me
The flash, the foam of the heaving sea,
And the sound of the surging waves
In the shore's unfathomed caves.
With its stately shaft and its verdant crown,
And its fruit in clusters drooping down.

IT MAY be that these lines of Frances Osgood's are not great poetry, yet they have run through my head again and again as I have gone about these palm-studded islands. In the lowlands and along the coasts the coconut trees have waved me a friendly greeting with the green plumes crowning their smooth gray trunks. Losing them for a time in the wilds of the Luzon mountains, I felt I was among old friends when I saw them again as I neared the sea.

I have been interested in the trees not only because of their beauty, but because the coconut has become one of the money-making commodities of the world and a great commercial asset to the Philippines. The island of Cebu has many coconut plantations and this afternoon as I left the spot where Magellan lost his life I passed one of the biggest coconut mills of the Far East. It covers more than seven acres, and its machinery would be considered wonderful in Pittsburgh or Chicago. This mill gets ship-loads of copra, or dried coconut meat, from all the islands about, and turns it into coconut oil, glycerine, and soap.

These products are sold abroad, while the cake left over after the oil has been removed is used in the Islands for feeding chickens, cattle, and hogs.

I find here a striking example of how the latest ideas in factory efficiency and industrial management have made their way across the seas to our remote possessions. Clustered about the mill are the bright clean homes built for the workers. They are equipped with bathtubs, running water, and electric lights, and are rented to the men for sums in a fair proportion to their wages, which, by the way, are about twenty per cent. higher than those usually paid in this region. The company has also built a theatre for entertainments and motion pictures, as well as a clubhouse and recreation rooms. The mill is operated continuously on three eight-hour shifts and I was told that the company found that breaking the night watch by a ten-minute intermission and a light lunch, served without charge, resulted in an increased efficiency that paid for the cost of the lunch and the time taken out.

As far as I can learn, the Filipino labourer does not complain that all these company activities are paternalistic. In fact, I doubt if he has ever thought of such a thing. Moreover, the mill seems able to keep its workers, whereas others are complaining of the scarcity of labour, a cry I have heard again and again in these Islands.

The coconut palm has always been the mainstay of the peoples living in the tropics. There is an old Polynesian proverb which says that "He who plants a coconut palm provides food, clothing, shelter, and medicine for himself and for a long line of posterity after him." Of the leaves the islanders make roof thatch; the meat is eaten as a delicacy; the oil is employed in cooking, for soap making, and

in some places for illumination; dishes, cups, and spoons are made from the shell, and ropes and mats are manufactured from the fibre.

Then there is the juice known as *tuba*, which comes from the unopened flower buds of the coconut tree. This soon ferments into a highly intoxicating beverage, from which a distilled liquor is also made. Not many years ago the annual production of *tuba* was valued at more than four million dollars, and the Islands are now using upward of ten million gallons a year.

The juice for this palm wine, as it might be called, comes from the top of the tree, and those who collect it must climb up both night and morning. I have frequently seen them at work. Notches are made in the trees so that the *tuba* man can go up as though climbing a ladder. He has a bamboo bucket on his back and a bolo in his hand. He makes a fresh cut in the blossom stalk under which he fastens a cup to catch the sap, and at the same time collects from another cup the sap that has flowed out from a gash made the night before. Sometimes, if the trees are close together, he bridges the gaps between with bamboo poles, so that he can go from one to another without coming down to the ground again. I have often seen the *tuba* gatherers thus walking tight rope, as it were, forty or fifty feet up in the air.

It is only within the last twenty-five or thirty years that coconut products have leaped into a place of great importance in world trade, and become one of our chief sources of fats. This came about largely because the demand for animal fats began to run ahead of the supply. For many years Europeans had been pressing the oil out of dried coconut meat and using it in the manu-

facture of soap. Then about the end of the last century it was discovered that the fat in coconut oil is similar to butter fat. It is on the basis of this fact that the business of making nut butters, oleomargarine, and shortening compounds has grown to its present large proportions.

The Germans were the first to realize the possibilities in copra production and they rapidly developed coconut growing in their Pacific island possessions. At the same time they built factories and invented special machinery for pressing out the oil, and greatly increased their imports of the dried coconut meat. Because of lack of fuel and shortage of labour, it was not at first attempted to operate mills on the coconut islands. The industry proved wonderfully profitable, and coconut plantations increased not only in the German territory but on the neighbouring islands as well.

Everyone remembers the fat shortage during the World War. The situation would have been far worse had it not been for the thousands of acres of coconut plantations in the copra islands. As patriotic American citizens denied themselves butter made from cream, and the peoples of Europe were compelled to go without it, the demand for the coconut oil butter-substitutes grew enormously. The products themselves were much improved, and more and more copra was shipped to the oil mills. Then shipping space grew scarce and expensive, and copra began accumulating in warehouses in the Philippines and elsewhere for lack of vessels to take it away. The result was that mills were quickly built near the coconut plantations, for oil took up far less room on board ship and was in other ways a more desirable cargo than the bulky copra. In the Philippines the industry was revolutionized, especially after a plan

was worked out whereby American steamers carrying fuel oils to the Far East arranged to take on return loads of coconut oil. Mills sprang up in the Islands almost overnight and many fortunes were made in a few months. But when the war ended and shipping space was easier, it was found that the industry was over-expanded, profits fell, and some of the mills had to shut down. Since then there has been substantial recovery, and both the copra and coconut-oil industries of the Philippines now seem firmly on their feet.

The increase in the quantity of coconut oil sent out from the Islands has been nothing short of amazing. In 1910 the Philippines exported one hundred and twenty-six pounds, valued at sixteen dollars, none of which went to the United States. Yet three years later the export was 5,000 tons, valued at more than $1,000,000, and we took nearly all of it. To-day the coconut oil shipped away in a year comes to more than 107,000 tons, is valued at $15,000,000, and constitutes between ten and fifteen per cent. of the total exports from the Islands. The shipments of copra are now above 173,000 tons, worth $14,000,000. About half the copra and practically all the coconut oil are sold to the United States.

It used to be that coconuts were grown in a more or less haphazard fashion. But this condition has changed since copra and coconut oil have become so important in the world's markets, and the best methods of planting, harvesting, and treating the crop are now studied. For instance, the trees were formerly set much too close together. This probably grew from a custom once followed in the Philippines of selling coconut plantations at so much per tree, which sometimes resulted in a stand of as many as

two hundred trees to the acre. In the fight for plenty of sun and air some of the closely planted palms spent all their strength in running up to great heights, so that there was a low yield of nuts per tree, and a high percentage of sterile trees. Moreover, once they were put in the ground the palms were expected to look after themselves. Now it has been found that the trees do best when they are spaced about thirty feet apart and when the soil between them is kept clean and loosened at intervals. I have ridden through many coconut groves which for their orderly planting and careful cultivation rank with our best fruit orchards in the United States.

Seed nuts are selected from the most productive trees. They are picked by hand and are carefully lowered to the ground, for if a cracked nut is planted it decays and will not germinate. The nuts are stacked in a dry, airy place to cure until the milk has dried up and the meat is firm and hard, after which they are put into specially prepared seed beds. When the shoot that finally thrusts itself out through the hard husk of the nut is fifteen or twenty inches high it is ready for transplanting. In seven years that little shoot will be a tall tree bearing perhaps fifteen nuts; in its tenth year it will yield sixty nuts, and keep on at that rate for fifty or sixty years. Annual yields of a hundred or more nuts from matured trees are not uncommon on well-cultivated plantations, and there are occasional crops of two hundred or even three hundred nuts per palm.

The nuts are first husked by being struck against a plough-point set in a heavy block of wood. This splits apart the thick outer shell, and the nut falls out. Practically all the husking in the Philippines is done by hand

An old Polynesian proverb says that "He who plants a coconut palm provides food, clothing, shelter, and medicine for himself and for a long line of posterity after him."

Coconuts grown on inland plantations are often tied into rafts and floated down the rivers for long distances to concentration points, of which Manila and Cebu are the most important.

In boats, carts, and pack trains, the dried coconut meat, known as copra, is brought to the towns for shipment abroad or to the mills where coconut oil is extracted.

and it seems unlikely that mechanical huskers will ever be much used here, as the process is simple and one man can handle a thousand a day. Next the nuts are cut in halves by a single stroke with a bolo. After the split nuts have been left in the sun until the meat shrinks away from the shell, the meat is removed and the drying is continued, in the sun, in an artificial dryer, or over a fire. In rainy districts the copra is dried on bamboo screens in crude furnaces, but the smoke injures the product so that it does not make as good oil or bring as high prices as copra sun-dried or put through artificial driers. Poorly dried copra may contain from ten to fifteen per cent. of water, and this often causes it to mould and deteriorate when shipped. Thousands of dollars are lost every year by the Philippine growers because of this fact, but some of the big planters are installing mechanical driers, and there is an effort to get the small growers interested in coöperative drying plants.

At present the profit in coconut growing ranges from nearly thirty-five dollars an acre on the best-managed plantations down to about five dollars on those where backward methods are used. Some of the plantations are only ten acres in extent, while there are others two hundred and fifty times as large.

I asked a big coconut grower in Cebu what he thought of the future of the industry in the Philippines. He replied:

"I think there are great possibilities of expansion. There was a slump just after the war, but the growers and oil men have picked themselves up again and I believe that the whole industry is now on a better basis than ever before. Though the fabulous prices of war time will not

return, I see no reason why the demand for coconut products should not continue to increase steadily for years to come. The world's present needs cannot be met by the decreasing supply of animal fats, and new markets for vegetable oils are continually being developed.

"For example, in Asia and Africa there are millions of Mohammedans, Jews, and Buddhists, whose religious beliefs restrict their use of animal products. Coconut oil is finding a big outlet among them. American manufacturers are discovering that, as it contains little or no acid, it makes an excellent lubricant. Moreover, the food chemists have worked out better and better formulas for its use in table and cooking fats. Do you realize that last year the United States used sixty-five million pounds of coconut oil in the manufacture of nut butters alone?"

"Have you coconut lands to take care of such a big growth in demand as you anticipate?" I asked.

"Yes, indeed," was the quick reply. "At present there are some ninety million coconut trees in the Islands, but we have the room and the right soil for plenty more. Mindanao contains thousands of acres suitable for coconut culture. There are other thousands of acres in the Bondoc Peninsula of Luzon, in the islands of Palawan, Mindoro, and Panay, in the Sulu Archipelago, and in the highlands of Cavite and Laguna."

"In the highlands, did you say?" I asked. "I thought coconuts grew only near the sea."

He smiled. "Well, I suppose you have heard the pretty saying of the Pacific islanders that coconuts will grow only in sight and sound of the sea. I own that is a poetic thought, yet practically it is an exploded theory. The coconut palm flourishes wherever it can get its crown

in the sun and its roots in an alluvial, volcanic or sandy, friable soil at least two feet in depth. Favourable conditions for its growth are found all over the Islands, in the interior as well as on the coast.

"Already the Philippines lead the world in the export of coconut oil, while only the Dutch East Indies are ahead of us in copra exports. I believe that in the future we shall not only maintain our leadership but go even farther ahead of our competitors in the South Seas."

CHAPTER XIX

THE WORLD'S BIGGEST LEPER COLONY

JUST now as I sat here in my cabin on the *Alba* I noticed a coast-guard cutter putting out from the Cebu docks. On board were lepers on their way to the great colony established for them on Culion Island in the China Sea. I have heard it said that even if we had failed in all else here in the Philippines, what we have done at Culion would justify the American occupation.

When I was in the Islands before, lepers were scattered throughout the archipelago, and in many places were allowed to roam at large. They begged at the doors of the churches and one never knew but that perhaps they were in the markets handling the fruits and vegetables. The Spaniards had made but feeble efforts to control either the disease or its victims. The three leper hospitals they had established could accommodate altogether not more than five hundred patients, yet it was estimated that there were then thirty thousand cases in the Philippines.

One afternoon during my former visit I took a carriage and drove out to the leper hospital at San Lazaro about three miles from the centre of Manila and not far from the outskirts of the city. As I went past a market where hundreds of men, women, and children were crowding and pushing one another, I thought how easily one leper could contaminate the whole throng. Going by the thatched

huts swarming with thousands of the labouring classes, I drew up at last before a big white building not unlike a penitentiary. It was surrounded by extensive grounds, and shut off from the road by a thick wall of stone.

Entering the gate was like going into a prison. I found myself in a long passage walled with stone, and far down at the end saw the barred doors of the hospital itself. There was a native at the entrance who looked ugly enough to be a patient. He pointed across the court and told us to go in. We did so, and within a few seconds were in the presence of two score horrid-looking specimens of humanity, who ran to the doors to meet us. Some were young, some old—all were lepers. Here was a boy, brown-faced, bright-eyed, and as quick in his actions and joyful in his laughter as our own boys at home. But his hands and his breast were covered with white spots, and one of his ears had already begun to drop away. Next to him was a man whose nose had disappeared and whose eyes were bleared with disease. The foreheads of some were falling in, the toes of others were almost gone, and the bodies of many were covered with sores. The sights were so horrible, indeed, that words fail to describe them.

As we hesitated the lepers gathered around us. I motioned them off, but they pointed to my camera, and one said "*retrato*," the Spanish word for photograph, and holding out his mutilated hands added these two words in English, "Give money." When I took out a Mexican dollar and threw it to him he collected the repulsive crew in the sun and posed them for me.

Just as I snapped the button the native doctor appeared and we went together through the building with the ghastly crowd at our heels. We passed upstairs through

one long hall after another, each filled with beds, upon some of which lepers were lying. The halls were clean and well lighted. The walls were whitewashed, and the building was cool and neatly kept. The floor was of hardwood, polished so that our faces were reflected in it as we walked through.

Leaving the men's ward, we went next to that for women. The patients were of all ages, from little tots of four up to gray-haired hags of sixty. Most of them were idle, sitting about talking, smoking, and chewing betel; the disease, as it progresses, takes away all ambition to work. One woman had her mouth so eaten away that she had neither teeth nor lips left to hold her cigarette. Her nose was almost gone, but she had put the cigarette in one of her nostrils and was puffing out the smoke through the hole where her mouth should have been. I took a photograph of five of the worst cases, trembling as I did so for fear I might be infected.

In Cebu conditions were even worse than in Manila. After the withdrawal of the Spanish bishop in charge of the leper hospital here, and before our troops arrived, there was an interval of some months, in which time the lepers dispersed and scattered all over the island.

What changes since then! I have not seen a leper since I came to the Islands, and except when I have inquired about them, have scarcely even heard them mentioned. Instead of the thirty thousand or more lepers supposed to be threatening the health and safety of the rest of the population twenty-five years ago, there are now but one fifth or one sixth that number in the archipelago, practically all of whom are concentrated in the Culion colony. The American doctors soon found that the Spaniards

had been careless in their diagnoses of leprosy, and that thousands who had been declared infected really did not have leprosy at all. Under expert examination these cases were eliminated and by suitable treatment many were made whole and happy instead of being doomed to isolation and lingering death.

One department of San Lazaro is still devoted to lepers, the hospital being used both as an experiment station and concentration point for sufferers from other parts of the Islands. After careful diagnosis, some of them are sent on to the colony at Culion, while others are kept for further observation and treatment at San Lazaro. Some three hundred leper patients are now being cared for in the hospital and for at least some of them there is hope of recovery.

In talking with a doctor in Cebu I have learned something about the leper conditions in the Philippines to-day and more especially about the colony at Culion. This doctor is a well-educated Filipino and proud of the progress that has been made in health matters since the American occupation. When I asked why Culion had been chosen for the Philippine leper colony, he replied:

"Well, for one thing, it is removed from the more thickly populated islands, and there were not many people living on it to be sent away to make room for the lepers. Best of all, it is high and healthful, and has a good water supply."

"When was the colony opened?" I inquired.

"Not until 1906," was the reply, "and then only after many disappointments and delays. It was necessary to build a whole town, and put in streets, and water and lighting services, besides docks, dwellings, and other facilities. Things were going on well enough when all at

once there was a rumour that a shipload of lepers was arriving. Three hundred workmen ran away and it was weeks before another force could be gathered together. Lumber had to be shipped from Manila and much machinery and equipment had to come from Europe or the United States. Machine parts were lost in transit, which meant six months' delay in getting duplicates from abroad."

"But even after everything was ready for them how did you get the lepers to go out to the island?" I asked.

"As the work progressed an educational campaign was carried on to get the people to understand the necessity for segregating the lepers and to make the lepers themselves willing to leave their homes. As soon as there were accommodations for two or three hundred a steamer was sent out with an invitation to lepers to come aboard and join the colony. There was every effort to use as little force as possible and, as a matter of fact, only rarely was it necessary. The poor creatures came from all sorts of places where they had been imperilling the health of others. Among them were salesmen in cheese factories, clerks in grocery stores, coachmen, teachers, and workers in tobacco factories."

The doctor's words reminded me of what I had been told by a former American official in the Philippines. One of his most painful duties was committing lepers to Culion. Sometimes, he said, a man's enemy would report him as having the disease, and the supposed victim would have to be summoned for examination. If he was found to be a leper sad scenes usually followed. His relatives, more or less hardened to the disease and not having the dread of it that one might expect, would often beg

There is an ever-growing demand for coconut products, for the world's needs cannot be met by the decreasing supply of animal fats, and new markets for vegetable oils are continually being developed.

In the well-managed leper colony on Culion Island the patients not only receive expert medical attention but are provided with employment and the opportunity to live much like normal people.

A model institution of the Philippines is the penal farm at San Ramon, near Zamboanga. The coconut plantation run by the convicts is considered one of the best cultivated estates in the Islands.

permission to keep him with them. Finally, they would offer bribes, bidding higher and higher for a favourable decision. My friend said that at last, after he had more than once refused to accept their money, they would exclaim, "But you don't understand. That is *all* we have!"

"Often," continued the doctor, "the lepers are fearfully distressed at leaving their families. But they begin to cheer up before long and, in fact, I believe they are frequently far happier at Culion than they were at home. It used to be that the poor things wanted to escape, but I understand that in the last year or so there has not been a single case of a runaway.

"Do not think that Culion is like a prison community. On the contrary, every effort is made to have the lepers lead a normal life. They live in comfortable houses of nipa palm, each capable of accommodating from five to seven people, or else in one of the concrete dormitories which are divided into six apartments, each suitable for twelve persons. These dwellings were built with special regard for ventilation, an important item because of the unpleasant odours characteristic of leprosy. Those who are not too sick work vegetable gardens, serve on the police force, or play in the colony band. At their community theatre there are motion pictures and amateur theatricals, with lepers taking the parts. The children go to the school and play games just like any other boys and girls. Only about ten per cent. of the five thousand lepers now at Culion need hospital attention, and the others live very much like normal Filipinos.

"There is a library and reading room, and church services are held regularly for Catholics and Protestants. The colony has its own money, a special aluminum cur-

rency which does not circulate elsewhere. In a recent year the government paid out nearly six thousand dollars in this coinage to lepers for the fruits and vegetables they had raised in their gardens and sold to the management. Service on the police force and at other posts held by lepers is paid for in the same way. If a leper wants to send off for something, he exchanges his aluminum coins for a money order at the post-office, but generally he can buy what he needs at the colony store."

"But how about the people who look after the lepers?" I asked. "Are they not in great danger of catching the disease?"

"Not at all," replied the doctor. "They are amply protected and no one who goes out to help at Culion need feel that he is a martyr condemned to die of leprosy. As perhaps you know, many lepers do not die of that disease at all, but of some other, contracted on account of their run-down condition. The non-leprous employees live in the adjoining village of Balala. Through this part of the colony supplies and mail come in. Every piece of mail leaving Culion is thoroughly disinfected with formaldehyde. As a matter of fact," he added, "leprosy is not nearly so contagious as many people seem to think. It is contracted only through very intimate contact. There are even cases on record of women who have married and outlived one or more leper husbands without themselves contracting the disease."

I asked my doctor friend if it were true that cases of leprosy were really being cured by the chaulmoogra oil and other new treatments of which I had heard a good deal. Like most men of his profession, he was cautious about committing himself.

"It has been known for years," he said, "that the oil from the seeds of the chaulmoogra plant would at least alleviate, if not arrest or cure, leprosy. This oil has long been employed in India as a palliative, and in recent times it has had more or less use in all countries where leprosy occurs. The trouble is that, taken by mouth, its action is extremely slow, and, furthermore, it makes most patients so ill that it has to be given up. Dr. Victor Heiser, to whom belongs much of the credit for the colony at Culion Island, worked out a method of mixing it with olive oil and injecting it hypodermically. Nowadays chaulmoogra oil is administered almost altogether by hypodermic. Other treatments are being tried, also, but, so far, the chaulmoogra oil has given the most satisfactory results."

"Do you mean by 'satisfactory results' that actual cures have been effected?" I asked.

"Well," he replied, "some noted doctors are now bold enough to say that leprosy is no longer incurable, but I had rather not make such a positive statement. You see, leprosy is a disease that may show itself again months or years after there has been an apparent cure. At least, it is certain that a number of cases have been discharged from Culion seemingly well and sound, and, after several years, have shown no signs of the disease.

"Some remarkable recoveries have been recorded. For instance, a young Hawaiian leper came to the hospital at Honolulu limping and with his right hand maimed. First he was examined for his general condition and was given tonics and special treatment to build him up. Then he was given weekly injections of the chaulmoogra oil mixture. Gradually he grew so much better that he

could play tennis and became the swiftest runner in the colony. At length the symptoms disappeared and he was discharged and took up a clerical position. Another case is that of a woman who had entirely lost the use of her fingers, parts of which had dropped away. Under the chaulmoogra treatment the progress of the decay was arrested and she recovered the use of her hands to such an extent that she could sew and knit.

"Even after signs of active leprosy have disappeared the doctors take many precautions before turning patients loose in the world," he continued. "After three negative examinations a patient is passed to the quarantine house, where he stays for six months. Then another examination is made and if results are still negative he is released on parole for a year and a half, during which he reports monthly. If the disease has failed to show itself then, he is considered cured, but must be examined every three months for two years. The number of persons so discharged who have had no relapse encourages the doctors to believe that they have found a way at least to control and ameliorate leprosy, if not to cure it."

Almost equal to what has been done for the lepers is our work of prison sanitation and reform in the Islands. When we occupied the Philippines, Bilibid Prison in Manila was a world scandal. In it were racks, pillories, stocks, and whipping posts, not relics of a bygone day but implements in actual use. At the time we took possession, hundreds of prisoners were men against whom no crimes were charged on the record. Many did not know why they had been incarcerated, and had been there for years awaiting trial. Three hundred were in chains.

When the American troops started in to clean Bilibid

they waded ankle-deep through filth and slime. The inmates were drinking foul water and sleeping on bamboo beds crawling with vermin. The death rate was two hundred and sixty-one per thousand. Almost immediately after we took over the prison, steel bunks were put in, modern water and sewer systems were installed, and sanitary buildings finally replaced the gloomy horrors erected by the Spanish in the days when sanitation was merely a word in the dictionaries.

To-day there is no finer prison in the world than Bilibid. The health of the convicts is, I should say, even more carefully guarded than are their persons. Most of them come in illiterates; in the prison schools they learn to read and write English from teachers who are themselves prisoners. Each man is given his choice at learning a trade, and goes to work as a machinist, sign painter, cabinet maker, or other craftsman. When he leaves the prison at the end of his term he can always be sure of a job. The great fan-backed rattan chair made in Bilibid is one of the best-known products of the prison shops. They turn out, besides, wagonwheels, desks of Philippine mahogany, and canes and swagger sticks. The women prisoners make embroidery and many other articles, besides all the clothing of the convicts.

By good conduct, prisoners can earn the privilege of transfer to the penal colony at Iwahig, on the island of Palawan. Here on a reservation forty square miles in area about fourteen hundred convicts are engaged in farming. At the end of a six months' trial a man is given five acres of land, which he may cultivate after hours and on holidays for his own profit. If he makes good, the government will lend him money for a house and for

agricultural implements. In due time, if he is married, he may have his wife and children come to live with him. When his term is up he may leave Palawan or stay on if he likes. So far about a hundred families have remained.

Similar to the Iwahig colony is the San Ramon Prison Farm in Mindanao. There, not far from Zamboanga, between seven and eight hundred convicts are doing agricultural and industrial work. One group forms the fishing brigade, fifty convicts who go out in boats to catch sea food for the prisoners. The coconut farm run by the inmates of this colony furnishes thousands of nuts daily to a big drying plant at Zamboanga and is considered one of the model plantations in the Philippines.

CHAPTER XX

ON THE 'SUGAR ISLAND OF NEGROS

I AM writing these notes at Dumaguete, on the island of Negros, within a short distance of the lower tip of Cebu and at the southern end of the Visayan group. From where I am sitting the big round island of Bohol is in sight, while on a clear day one may see the northern shores of Mindanao. I am in a volcanic region. Just opposite is Siquijor Island, thrown up from the sea not many decades ago. Behind me rise precipitous mountains, one of which, Kanlaon, was in eruption in 1910. Not far from Dumaguete is another crater pouring forth smoke and gases, and there are hot mineral springs in the neighbourhood.

I find Dumaguete a thriving little Philippine city of twenty-five thousand people. It has good roads, fine schools, and excellent shops, run mostly by the Chinese. In the plaza is an old watch tower built to guard against the Moro pirates who used to make things especially hot for the people of Negros. The most interesting thing I have seen in the town, however, is Silliman Institute, the largest private school in the archipelago. I visited it just the other day.

The Institute, which was opened in 1901, was founded through the generosity of Horace B. Silliman, of New York, who took a deep interest in the Filipinos. It is under the auspices of the Presbyterian Board of Foreign Missions,

which pays the salaries of the American members of the faculty. Friends of the school in America provided most of the land and many of the buildings. The latter include dormitories for boys and girls, an assembly hall seating six hundred people, a hospital, a well-equipped science building, and a library containing more than eight thousand volumes. Part of its forty acres of ground is given over to an athletic field with a fine track and one of the best baseball diamonds in the Philippines. The champion tennis player of the Islands is a Silliman boy. In the buildings of the industrial department there are shops in which the students learn such trades as wood-working, plumbing, automobile repairing, and printing. The school catalogue, which lies before me, was printed by the students of this department, and a good job it is, too. It shows an enrolment of seven hundred and fifty boys and girls from all parts of the Philippines, ranging from third-grade primary pupils to students taking college courses. The high-school department has the largest number.

To me one of the most remarkable features of Silliman is the Shakespearean play given every year in an open-air amphitheatre. This year, "Midsummer Night's Dream" was the play and it proved a great success. So far the student actors have put on "Julius Cæsar," "Hamlet," "As You Like It," "Othello," and "Twelfth Night." Finding Shakespeare rendered in English by Moros, Visayans, and Tagalogs away out here in the midst of the Pacific is one of the surprises of my trip.

It was Mr. Silliman's idea in endowing the Institute that it might train young men and women for positions of responsibility and influence in the Islands. Glancing over the list of graduates and the places held by them, I

When we took over the Philippines we found Bilibid penitentiary a filthy hole full of idle inmates. To-day there is no finer prison anywhere and every convict learns a useful trade.

In Bilibid only prisoners in disgrace have to wear stripes. Good conduct will earn the privilege of transfer to the penal colony at Iwahig, where a convict may cultivate an allotment of land for himself.

should say his hope is being realized. I notice that one of the Silliman degree men is a doctor at the leper colony at Culion; another is a professor of law in Manila; many are teachers, and not a few are studying at Chicago, Cornell, Princeton, and others of our universities.

Negros is the great sugar island of the Philippines. It is more than half as big as Massachusetts and has a population about equal to that of Boston. A chain of high, rugged mountains divides the island into the two provinces of Oriental Negros and Occidental Negros. Dumaguete is the capital of Oriental Negros. This is the chief kapok district of the Philippines. I have seen the "false cotton" trees growing all over the Islands, but Oriental Negros is the only province that exports the silky fibre from their seed pods which we use as stuffing for mattresses, pillows, and life preservers. At present the Dutch East Indies have almost a monopoly of the kapok trade, but I see no reason why the Filipinos should not cultivate the trees and make a good thing out of the business.

Sugar cane is grown on plantations in Oriental Negros, up the coast a little way from Dumaguete, but most of the sugar exported from the Philippines comes from the province of Occidental Negros. When Magellan landed on Cebu in 1521 he found the natives raising sugar cane, and, I doubt not, saw both children and grown-ups sucking the sweet stalks just as they do to-day. In 1795, when Uncle Sam was the merest infant in the family of nations, we imported one hundred and thirty-two tons of sugar from the Philippines. That sugar probably came from Luzon plantations within easy reach of Manila. After the opening of the Suez Canal in 1869 had reduced the distance between Manila and Liverpool to less than

ten thousand miles, the European demand for Philippine sugar greatly increased. Plantations began to appear in the Visayan group and under the leadership of the Spanish Friars this island became the chief sugar region of the Philippines.

Near the end of the nineteenth century the beet-sugar industry of Europe reached a high state of development, turning out a refined product that won immediate favour. At this time all the Philippine cane sugar was what is known as *muscovado,* which is neither pure white nor of the highest quality. Other cane-producing countries met the standards of the beet-sugar makers by installing modern mills for making centrifugal sugar. But the Philippines were upset by the insurrections against the Spanish régime, and the disturbances following the American occupation, while an epidemic of rinderpest carried off about eighty per cent. of the work animals in the Islands. Consequently, the production of sugar fell off. During the first ten years of our possession of the Islands the sugar exports averaged only about half what they were in the last ten years of Spanish rule.

In 1909, however, the Payne-Aldrich tariff act, providing for the free entry into the United States of a maximum of three hundred thousand tons of Philippine sugar, considerably stimulated the industry and American capital became interested. In 1910 the first modern centrifugal mill in the Philippines was erected in Mindoro Island, on the great San José estate of ninety thousand acres, which had been sold from the Friar Lands to some American sugar men. Two years later American capital financed the big coöperative central at San Carlos in Occidental Negros. The capital invested in the sugar industry of

the Islands now approximates one hundred million dollars, of which forty per cent. is American money and forty per cent. was furnished by Filipinos.

Philippine sugar suffers in competition with that from other sugar-growing areas because much of the cane is crushed in crude mills that do not get out all the juice, while the finished product contains a great deal of molasses. In the province of Ilocos Sur, on the northwestern coast of Luzon, for example, most of the mills use old-style wooden crushers, worked by a carabao walking slowly round and round. The juice is boiled in small open kettles and the sugar is usually dirty and often burned, so that it brings the lowest prices of any exported from the Philippines.

In a mill I visited in the province of Pampanga, iron crushers were used, but results were little better. As I crossed the plantation with its owner we stopped for a moment to watch the men cutting the cane. Some were trimming away the leaves and removing the tops, which are kept for planting. Next they cut the stalks, laying them in piles on the ground to be gathered up by the carabao carts and sleds and hauled to the mill. When I asked the planter why the stalks were slenderer and therefore less rich in juice than those I had seen in Java and other sugar countries, he replied that his old-fashioned mill could not handle large stalks.

I noticed in another part of the plantation two men turning up the soil with wooden ploughs drawn by carabaos, while behind them came girls and women dropping the cane shoots. The pieces of cane, about six inches long, were laid end to end in the furrows. The soil was slightly sandy, but it was as black as my boots and very rich.

The crushing machine at the mill consisted of a single set of iron rollers turned by two carabaos hitched to it by ropes of bamboo fibre. A man stood by, feeding in cane from a pile of stalks. The juice ran into a vessel connected with a big receiving tank inside a low shed, while the bagasse, or crushed cane, was piled to one side to be dried and used as fuel.

The furnace was merely a trench dug under a part of the shed, or boiling room. Above the trench were four wooden vats with iron bottoms. While I looked, the man in charge ladled the juice out of the receiving tank into the first vat and stirred in a little slaked lime. As the fire in the furnace brought the cane juice to a boil, the impurities rose to the top and were skimmed off. After a time the man dipped the boiled juice into the next vat, where he again treated it in the same way. The processes of skimming and evaporation were continued until the syrup had been boiled in all four of the vats and was thick and sticky.

In another part of the mill I saw a number of great open clay jars. These, I was told, are known as *pilones*, and were introduced into the Philippines by the Chinese a long time ago for making what is called "clay sugar." When the syrup has cooled to the point where it begins to crystallize it is ladled into the jars. In the bottom of each is a hole two inches in diameter over which pieces of cane fibre are placed. The molasses drips through the hole into a vessel beneath the *pilon*, draining away from the sugar crystals for several months. Much of this "clay sugar" is consumed in the domestic market, for it is cheaper than that made in centrifugal mills, and, besides, many of the Filipinos prefer it to more

refined sugar because it has a higher molasses content and is sweeter. The principal buyers of the *pilon* sugar in the Islands are the Chinese, who refine it by a simple process until it is like our brown sugar. Some of it they export to China.

Now, just by way of contrast, let me show you a modern sugar central such as the one I saw in a drive out from Manila. A little while before, my car had whirled by a dilapidated mill with a tumbledown smokestack. A few more turns of the wheels and there rose before my eyes a big, up-to-date sugar mill with a towering chimney from which a plume of smoke floated like a banner of prosperity across the sky. Close to the central was the company village for employees—rows of neat cottages set in gardens along tree-lined, macadamized streets. There was a clubhouse with wide, cool-looking porches and also a hospital and a gymnasium containing a swimming pool. Except for the American manager in charge, practically all the employees, from common labourers to laboratory experts, were Filipinos.

Small locomotives running along tracks laid through the fields were bringing in the cane, which was lifted from the cars by machinery and transferred to a cane carrier. In the carrier the cane passed into the building, there to be seized by revolving knives and quickly cut into small pieces.

These pieces went next through several sets of crushers, which took out almost every drop of the juice, leaving the bagasse as dry as old bones. Sometimes the old-fashioned mills, which leave so much molasses in the bagasse that it must be dried out before it can be burned in the furnaces, have to shut down during rainy weather

because they cannot dry their bagasse. I have heard that in some years the loss from lack of dry fuel in Occidental Negros alone has run into several millions of pesos.

Inside the mill was what seemed to me a confusion of great iron pipes and tanks each of which played its part in the processes of making from cane juice the fine white sugar you use on your table. The final operation consisted of whirling the sugar crystals in porous iron baskets. As they revolved at dynamo speed, centrifugal force sent every drop of syrup flying from the sugar crystals and out through the holes, or pores, in the baskets until only fine, dry sugar was left. The syrup was caught in receptacles to be sold for stock food, while the impurities removed in the earlier stages were turned into fertilizer.

It costs five hundred thousand dollars or more to build a modern sugar central, but it gets so much more sugar from the cane than the old processes that it usually pays well. The carabao mills generally press out only about half the juice, the old-fashioned steam mills get from sixty to sixty-five per cent. of it, while the central gets all except about five or ten per cent. The big central at San Carlos in Occidental Negros is conducted on a coöperative basis. The owners grow very little cane, but grind for the neighbouring planters, taking in payment less sugar than was formerly wasted in bagasse.

Sugar centrals have multiplied rapidly in the Islands during the last few years. There are now twenty-six, with a total capacity of twenty-three thousand tons a day, and the percentage of centrifugal sugar in the whole Philippine production is steadily rising. Last year the *muscovado* exported was only 44,275 tons, while the centrifugal sugar exports came to 314,266 tons. Six years ago the centrif-

ugal product shipped abroad was not one fourth of the total sugar export.

Sugar now represents about one third of the value of all the exports from the Philippines. The banner year was 1916, when the free-entry limit of three hundred thousand tons was taken off and the sugar exports reached the amount of 375,000 tons. It is estimated that between 100,000 and 150,000 tons are consumed in the Islands. Still, the entire Philippine sugar output is small in comparison with Cuba's production of between 3,000,000 and 4,000,000 tons, and falls considerably below the crops of Hawaii and Porto Rico. In Hawaii and Java the average yield of cane per acre is five tons, in Cuba and Porto Rico it is two tons, while in the Philippines it is less than one ton.

Not only are the Filipino methods of cultivation poor, but the planters complain that the native labour is both insufficient and lazy. Yet, in a recent report the Governor-General pointed out that the Hawaiian sugar growers find the Filipinos such good workers that they employ some forty thousand of them in their cane fields and mills. He suggested that plantation owners would find the native labour supply adequate if they would take a human interest in the workers, and see that they are well housed, and looked after, and properly paid. In two years some fifteen thousand Filipinos went to Hawaii to work, largely, the Governor-General said, on account of the better treatment accorded them there. On the Hawaiian sugar plantations they have free quarters and free medical attention, and receive from twenty to thirty dollars a month for a six-day working week.

The labour situation is particularly acute in Occidental

Negros. There are in that province some four hundred sugar haciendas, varying in size from two hundred and fifty to six hundred and twenty-five acres. During the busy season each employs an average of between one hundred and two hundred men. Only about twenty-five per cent. of the workers live permanently on the plantations; the rest are brought in, generally under contract, from Panay and the Batan Islands. Besides their wages the labourers get rations of rice or corn and fish, with perhaps meat once a week. The planter is expected to advance wages to his tenants up to two months' pay, to furnish them with medicines and to support their families during illness. He is supposed to settle disputes among them, and, in general, keep them out of trouble. Custom allows him to fine his men when he thinks it necessary and to bring back a worker who has left owing him money. He may also collect from a debtor's children whatever was owed him by their deceased father.

The sugar growers complain that Negros labour is the most unsatisfactory in the Philippines. They say that the men do as little as they can, and spend most of their money and much of their time in gambling at cockfights. After a pay day often fifty per cent. of the men on a hacienda are absent from work, while it is said an average of from five to ten per cent. break their contracts, leaving the planter their creditor. On the other hand, the planters are accused of wishing to keep the men in their debt and thus in their power. One thing that complicates the plantation labour situation in the Philippines is the fact that so little farm machinery is used and at harvest times there is such a great demand for manual workers. In Negros the adoption of modern methods and machinery

Seven hundred and fifty boys and girls from all parts of the Philippines attend Silliman Institute, the largest private school in the Islands. Every year the pupils give a Shakespearean play in the open-air theatre.

Sugar cane has been grown in the Philippines for centuries but poor cultivation and crude methods of pressing and handling the juice have hampered production. Modern mills are now replacing such affairs as this one, however.

Sugar now represents about one third of the value of all exports from the Philippines. The chief sugar markets for the Islands are the United States, China, and Japan, and sales are limited only by the amount of cane grown.

is gradually enabling planters to do without such a large proportion of imported seasonal labour.

The Philippine sugar industry has a big opportunity. Its chief markets are the United States for centrifugal sugar and China and Japan for *muscovado*. Our sweet tooth demands more and more to satisfy it, and we can easily take all the high-grade sugar the Islands can produce. The Japanese are eating more sugar, while the standard of living in China is surely, if slowly, rising. If the Chinese should ever use as much sugar per capita as we Americans do, China alone would absorb the present sugar production of the whole world. Certainly the Philippine sugar industry is not held down by any lack of markets, and among its vast tracts of idle but fertile lands are thousands of acres ideally suited to sugar-cane growing. With irrigation, intensive cultivation, introduction of improved varieties, and the use of better milling methods, the yield from the lands already planted to cane can be multiplied several times.

CHAPTER XXI

IN ZAMBOANGA, CAPITAL OF MOROLAND

I AM in Zamboanga, the capital of the Moro island of Mindanao. As I write the face of old Datto Damakute looks in at the window. He belongs to one of the tribes about Lake Lanao and is typical of his kind. Let me give you a picture of him as he watches my typewriter. His big head is as brown as the skin of a well-smoked fat ham. His nose is the size of a baby's fist, and his black eyes pierce my soul. His mouth of cavernous proportions is filled with black teeth. Little streams of blood-red saliva are trickling down the sides of his chin, which is partly covered by a coarse black beard that looks like a shaving brush, and his oily hair hangs from beneath his red silk turban touching his black satin clad shoulders. His snug-fitting shirt is fastened with buttons of gold as big as an old copper cent, and his tight silk trousers wrinkle a bit around his ankles. He has a gorgeous green sash about his waist, while a knife nearly two feet long hangs in its sheath of bamboo from his left hip. Some of his friends, more timid than he, are standing behind him.

On my visits to the southern islands of the Philippines I have met men from a number of the tribes. According to Dr. Beyer, there are at least seven ethnographic groups among the Mohammedan inhabitants of the archipelago. Although all are of Malay origin and the

same religion, they differ widely in customs and language. I venture Damakute could not make himself understood by the Moros of Sulu, Cotabato, or far-off Palawan. The Moros are of the same race as the Christian Filipinos of the north, being the product of the various migrations that came here long ago from Borneo, Java, and Malaysia. They have become a separate people largely through their adherence to the Mohammedan religion. Each tribe has great pride of ancestry, and that datto looking in at the window probably has a genealogy longer than any recorded in the Public Library at Boston.

Some of the legends among the islanders are strangely like stories recorded in the Bible and the tales of the Arabian Nights. Dr. Najeeb M. Saleeby, the chief Arabic scholar of this part of the world, says the word "Mindanao" means "inundated," and indicates a tradition akin to the story of Noah. According to documents that he has translated, there was a time when nothing could be seen of this island but the tops of its mountains, upon which the people sought refuge. Then three or four terrible monsters appeared devouring every human being that came within reach. One of them was Kurita, who had more legs than an octopus. He lived on Mt. Kabalalan and destroyed all the people about it. The second was the terrible giant Tarabusaw, and the third was Pah, a bird many times the size of the roc of Sindbad the Sailor. Pah lived on Mt. Bita and was so immense that her eggs were each as big as a house. When she spread out her wings she covered the sun and made the earth dark. Pah ate human beings and only those who fled to the caves escaped her.

The three monsters were ruining Mindanao and the news of their depredations was heard all over the world.

These stories came to the ears of two rajahs, Indaraputra and Sulayman, who lived in far-away islands. One of these, Rajah Sulayman, took the part of Theseus who slew the terrible Minotaur, devourer of the maidens of Crete. Sulayman, however, had the advantage of the Greek hero, for he seems to have used an airplane. He flew to Mindanao, landed on Mt. Kabalalan, and cut the monster Kurita to pieces. After that he attacked Tarabusaw and killed him and then went on to Mt. Bita. As he dropped down on the mountain there seemed to be an eclipse of the sun. He looked up and in the dim light saw a huge bird descending. Pah was coming to avenge the death of her two comrades. Sulayman drew his sword, and was able to cut off one wing. The huge bird fell dead, but the heavy wing dropped on Sulayman and killed him.

When Sulayman failed to return, his brother, Rajah Indaraputra, took his airplane and went in search of him. He found the body of Sulayman and brought it back to life by pouring some heavenly water over the bones. Then, together, the two cleaned up the islands. The Moros believe these rajahs to be the ancestors of most of their people, some of whom have genealogies that date back almost to Adam.

When the Spaniards came they called these people of the southern islands Moros, from the Mohammedan Moors who had played such a part in the history of their home land. The Spanish priests were determined to convert all the people of the Islands to Catholicism; the Moros were equally determined to cling to the faith of Islam. The moment the Spaniards meddled with Moro territory they stirred up a hornets' nest and started trouble that they were never really able to control.

IN ZAMBOANGA, CAPITAL OF MOROLAND

For more than two and a half centuries the coasts of every peopled island in the archipelago were ravaged by the war junks of the piratical Moros. Villages were sacked, men were slaughtered or enslaved, and women were carried off to be the wives of the invaders. At one time for a period of four years the Spanish government had to remit the payment of tribute from Negros and other islands lying between it and Luzon because the people had suffered so much from the Moro pirates that they were too poor to pay anything. To this day one sees many of the little stone watch towers set up by the coast villages on the islands south of Luzon. Sometimes strong stone fortresses were built around the churches to make them places of refuge from the pirates, while at Bacuit, on the island of Palawan, a cave high up on the side of a cliff was always kept provisioned against raids. The cry "The Moros are coming" sent the non-Moslem natives skurrying to their strongholds or up into the mountains.

The Spaniards were powerless to cope with the situation, and it was not until the nineteenth century that the Moro pirates were curbed by Dutch and British gunboats. In the next century we put an end to their depredations.

I remember my first contact with the Moros when I visited Zamboanga on my mule transport. In those days a mule was worth more in the Philippines than a soldier, for there were no adequate means of transportation of men or baggage, and pack trains and carts were in demand at all of the posts. The only other available transport animal was the water-buffalo, which can make only about one mile an hour and is of little use in the hills. The horses in the Philippines were so small that a Missouri

mule could almost have swallowed one of them—so small that as we stopped at a port an American mule skinner on my boat lifted one of them in his arms to show his contempt for its size. Every detachment of troops that went into the mountainous interior needed its pack train, with experienced packers to handle the mules. We had a gang on board that now and then packed the mules on the deck of the steamer for practice.

We coasted from port to port, leaving a score or more of the mules at each stop. In some places, I remember, we dropped them overboard and let them swim ashore. The natives had not seen mules before and the children were in a panic for fear of being eaten. A good part of our cargo we put off here at Zamboanga, which was then under the command of Colonel Pettit. There was a Moro village near by, governed by the chieftain Datto Mandi, and I recall the remark of the colonel when I asked if it would be safe for me to go there alone. It was: "You can go if you wish, young man, but I warn you you had best tie your head on with a string before starting."

His advice was sound for at that time the Moros were going about with long krises attached to their waists. These krises were so sharp that I could shave the hairs from the back of my hand with any of them, and I was told that the natives were marvellously efficient in using them to disembowel an enemy. The Moros of higher rank were attended by slaves who carried campilans, knives with wide blades a yard long which were used chiefly for beheading, and with which they could cleave a man from crown to waist in one blow. A favourite stroke was made diagonally through the shoulder, cutting off the head, neck, and one half the chest. The old Moros sometimes

ham-strung their victims, and their common method of execution was to tie a man's hands behind him and behead him with a single cut. The body was then usually chopped into mincemeat by the men and boys who wanted to try their blades on human flesh. While I was at Zamboanga a story was current about a prince of Basilan Island over the way. He had ordered six men to be killed and after the execution chopped into one of the bodies, saying to some of our soldiers who were looking on: "I do that merely to see if my knife is sharp."

Yet I had no trouble whatever when I went to the villages of Datto Mandi, who had declared himself a friend of the United States. He had seven thousand men with him, and when I interviewed him he said he was ready to place this force at the service of the Americans in case of need.

Back in Moroland again, after it has been twenty-five years under American rule, I have met Datto Mandi's daughter, a charming young woman of twenty or so who speaks Moro, English, and Spanish, and has married an American merchant. I am told that Mandi's son, the present datto, is running a plantation near Zamboanga. There is now a girls' school in Mandi's home village and any one may go about there without the slightest risk.

In the old days, Datto Mandi had several wives and numerous slaves, Datto Utto had one wife and sixty concubines, and old Datto Piang, who is still living in Cotabato, has had ladies galore. One of Piang's twenty-eight or more children has visited the United States. The aged noble lives in a settlement of many houses and shops and has grown rich from his partnership with an American in the lumber business. On

state occasions he used to come down the river to Cotabato in a barge with seventy rowers, his own flag of purple, yellow, and red flying in the breeze, and scarlet-clad drummers and tomtom beaters making music for him along the way. When he went ashore he was attended by a servant holding over him his official umbrella, another carrying his walking stick, and a third bearing the spittoon which is a necessary accompaniment of betel-nut chewing. The other dattos of Moroland are similarly escorted on formal occasions.

In the eyes of the Moros one of their big men of the present time is the Sultan of Magindanao, who lives quietly in a village near Zamboanga, having surrendered all claims to power. I talked with him at Parang-Parang years ago. He was then maintaining considerable state, and his chief officials were with him. They were dressed in all colours with turbans of red, brown, and yellow, and jackets and trousers of variegated hues. They all carried spears and krises. Three slaves held silk umbrellas, trimmed with silver thread, over the head of His Majesty, while his betel slave humbly offered him a chew from time to time. The Sultan was a lean little fellow with a low forehead, straight nose, and hollow cheeks. His black jacket of homespun silk was fastened with gold buttons and his tight yellow trousers were upheld by a wide belt with a silver buckle as big as a flatiron.

His Majesty had his harem with him, and a dozen of his wives came out of the huts and stood under umbrellas before my camera, while Colonel Webb Hayes, the son of our former President of the United States, snapped the picture. Most of these women were lightly clad. They wore gaily coloured skirts, held tight under their armpits

Even where tractors are used in the Philippines deep ploughing is rare, with the result that the average sugar production is less than one ton to the acre, as compared with the five tons obtained in Hawaii.

The sugar planters of Negros complain that their workers are lazy and that they spend most of their money and much of their time gambling on cock fights, which are the favourite diversion of the labouring classes.

Zamboanga, capital of Moroland and chief port of the fertile island of Mindanao, was for years the main stronghold of the Spanish against the Moro pirates.

Some Moros object to their daughters attending the public schools with boys and make them study the Koran in classes by themselves. This prejudice is disappearing, however, since even Moro princesses are now teaching in the schools.

by a twist at the breast, and falling to their ankles. Now and then it seemed pretty perilous when one of the ladies gave her clothing a twitch, but no embarrassing accident occurred.

The Sultan's chief wife weighed about three hundred pounds. She was as broad as she was long and so fat that she waddled. Beside her was a younger wife, a girl of fifteen with a wealth of black hair and a face that would have been pretty had it not been for her black teeth and betel-stained mouth. She wore a dress of red and gold stripes over which was a jacket of green silk. The old dame, who might be called the Sultana, had a slave upholding a spittoon of solid silver which she used now and then while we were posing the picture.

These are a few of the high lights of Mindanac when we took possession and began the work of subduing the Moros. They are a peculiar people and never would have given up their arms had they not had faith in our promises. Like all Mohammedans, they do not seem to fear death, and will allow themselves to be killed rather than submit to what they feel to be wrong. Even now, one of them occasionally runs amuck in religious frenzy, and in Jolo a bell is rung to warn the people against any new victim of this mania.

The *juramentado,* as the Spaniards called such a fanatic, is a Moro who starts out vowing that he will kill every Christian he meets until he himself is killed. He may wish to commit suicide and uses this way to accomplish it. According to his religion, if he can kill a Christian he will go straight to heaven, where his victim will be compelled to serve him as a slave. The more Christians he kills the higher will be his place on the steps of the throne.

Like the rattlesnake, the *juramentado* gives warning before he strikes, for he announces his intention to the people. After going to a priest and taking an oath that he will die slaughtering Christians, he has his eyebrows shaved, takes a bath, and puts on his best clothes. He is usually clad all in white and his wife makes the gown, sewing it up stitch by stitch, knowing all the time that it will be her husband's shroud. The oath-bound murderer then arms himself with one of the terrible bolos or krises and starts out on the highway. As he goes on he often grows so crazy that he disregards the religion of his victims and indiscriminately slaughters everyone that comes in his way, endeavouring to add another and still another to his list. Cases are cited were a *juramentado* chased by a soldier with a gun and bayonet has turned and, seizing the bayonet, has forced it into his own body that he might thus get close enough to thrust his knife home.

When General Bates was here he guarded against the *juramentados* killing the Americans by telling the sultans and dattos that any priest who gave the oath to such a fanatic and any one else who had a hand in his crimes would be executed. This made such an impression on the Sultan of Sulu that he sent out a proclamation telling his people that they must not kill Americans, because, he said, "they are like a bunch of matches—if you light one all the others will go off." Besides, he added, "there is no reason why Mohammedans should kill Americans, because the Americans are not really Christians."

The three hundred and sixty thousand Moros in the Philippines are concentrated in Mindanao and the Sulu Archipelago, which together are often known as Moroland. Mindanao is about the size of the state of Indiana. It

ranks next to Luzon in area, but has not one sixth as many people, its population numbering only about seven hundred thousand. The island is by no means all Moslem. Its two hundred and seventy-five thousand Moros are found here and there along the western coast of the province of Zamboanga and along the southern coast of the island as far as Davao. They extend also far up the Cotobato River and people the Lake Lanao region. But the interior of Mindanao is occupied for the most part by pagan tribes, while its northern and eastern coasts are inhabited by Filipinos who have migrated from Cebu, Bohol, and others of the Visayan group. As I have said, Mindanao and the rest of Moroland are governed by the Bureau of Non-Christian Tribes.

The possibilities of Zamboanga's marvellously fertile soil and the resources of its forests have scarcely been realized, much less developed. The government has, however, been quite successful recently in getting colonists to leave the more densely settled islands at the north and come down into this garden spot of the Philippines. At first Christian Filipinos were afraid to live in Moroland, but, now that the Moros have been pacified, their fear is fading away. A recent report of the Bureau of Non-Christian Tribes states that the relations between Christians and non-Christians in all the provinces under its jurisdiction "continues to be excellent," and goes on to say that there is an increasing friendship and harmony between Mohammedans and Christians.

One thing that helps keep the Moros quiet is undoubtedly the fact that Mohammedan men and women are being employed as teachers in the Moro schools. In a recent year the Director of Education reported that in

Moroland "six of the highest-ranking Mohammedan princesses of the sultanate of Sulu are teaching in the public schools." One of them was a niece of the Sultan. From the big normal school at Zamboanga teachers are going out each year. Gradually the Moslem prejudice against the education of their daughters is being overcome and there are now fourteen thousand Mohammedan girls at school in Mindanao and Sulu. Many of these come from the families of dattos, priests, and hadjis (those who have won prestige by making the pilgrimage to Mecca). Such examples will, of course, be followed by the daughters of the less important Moros.

The teachers find it somewhat difficult, however, to keep the girls in school after they have reached the marriageable age, which is here about fourteen or fifteen. Only a few days ago a girl of thirteen came to an American teacher in one of the Zamboanga schools and said she was going to leave. The teacher asked why, assuring the girl that she was doing well in her studies. The maiden answered: "I have a great appetite for men and I am going to get married."

Until 1914 the Moro Province, now called the Department of Mindanao and Sulu, was under the military government. It was here that Generals Wood, Bliss, Scott, and Pershing added to their reputations. Between them they got matters so well in hand that when Pershing was relieved of his post as military governor of the province, both he and General Bell felt that it was ready for civil government. Frank W. Carpenter, who had come out to the Islands with Taft, was appointed governor, and served seven years, carrying out his famous "policy of attraction." One of his methods was to en-

The Mindanao policeman brightens his costume of American khaki with a green sash and a red fez. He is armed with a two-foot bolo, without which, in the early days, no Moro felt he was fully dressed.

This well-educated and attractive young woman is one of the evidences of the changes of the past twenty-five years. She is a daughter of Datto Mandi, a powerful Moro chieftain who once gave us considerable uneasiness.

courage the Moro dattos to go with him each year to Manila and meet the Governor-General. I have heard that he actually coached them in table manners so that they might not be embarrassed when they were entertained at Malacañan Palace.

Not long after Governor Carpenter took hold he was able to report the peaceful surrender of the Moro outlaw Alamada, who since Spanish days, had been giving a great deal of trouble in Cotobato. The chieftain finally agreed to go to Manila provided he might carry his kris everywhere he went and would not have to put on "Christian" clothes. Before the end of his first day in the city he had laid aside his kris and had somehow or other managed to get himself an American suit. When he got back to Cotobato he became a great champion of the establishment of schools.

I myself notice many changes in Moroland. There are good-sized towns growing up in the Cotobato Province, for example, and at the head of the Gulf of Davao the city of that name now has eight or ten thousand people. There are many Japanese, Chinese, and Christian Filipinos, some of whom have become wealthy from the great hemp plantations on the rich lands along the gulf.

Zamboanga, which has now about thirty thousand people, is more than ten times as large as it was when I was here before. The town was established by the Spaniards in 1635 as an outpost among the Moros, against whose attacks it was walled and fortified. The old fort is still standing. Once, to reward the Christian Filipinos for their bravery and loyalty in helping to repel an assault by the Moros, the colonial authorities declared the entire native population of Zamboanga to be Spaniards of the

first class. An unexpected effect of this was the birth of a contempt for all manual labour among the Zamboangans. The Spaniards did not toil, they said, and now that they were Spanish citizens, why should they?

To-day Zamboanga is one of the most beautiful little cities of the tropics, with so many up-to-date features that it is a surprise to visitors from the States. The town is in the midst of a coconut forest, the lowlands about it are covered with palms, and tall banana plants rustle their leaves as one walks through the streets. Many of the houses are hidden in flowers. Midway through the city runs a canal with water like crystal and there are several plazas full of gorgeous vegetation. In several of the plaza fountains are grottoes decorated with ferns and other plants, and here and there in the midst of the foliage incandescent light globes tint the spurting waters a half-dozen different colours. The water in the fountain on Pershing Plaza drops down from pool to pool in which at night big golden globes show silvery fish swimming about.

Zamboanga has streets as smooth as a floor and concrete sidewalks. The grounds of the military post form one of the most beautiful parks of the Orient, and altogether I know of no more charming little municipality in the tropical world. Moreover, the climate is delightful. The sun is strong at midday, but there is always a good breeze and, although it is April, I invariably have to pull up an extra cover toward morning.

CHAPTER XXII

BASILAN, OUR NEW RUBBER ISLAND

I HAVE come to Basilan Island to have a look at the new rubber plantations that are being developed here by American citizens. This island is little more than a speck in the Philippine group, but it is the scene of ventures that may one day set the United States free from the stranglehold the British and the Dutch now have on the production of the world's crude rubber. This will be accomplished if even a relatively small fraction of the present world output can be grown in the Philippines.

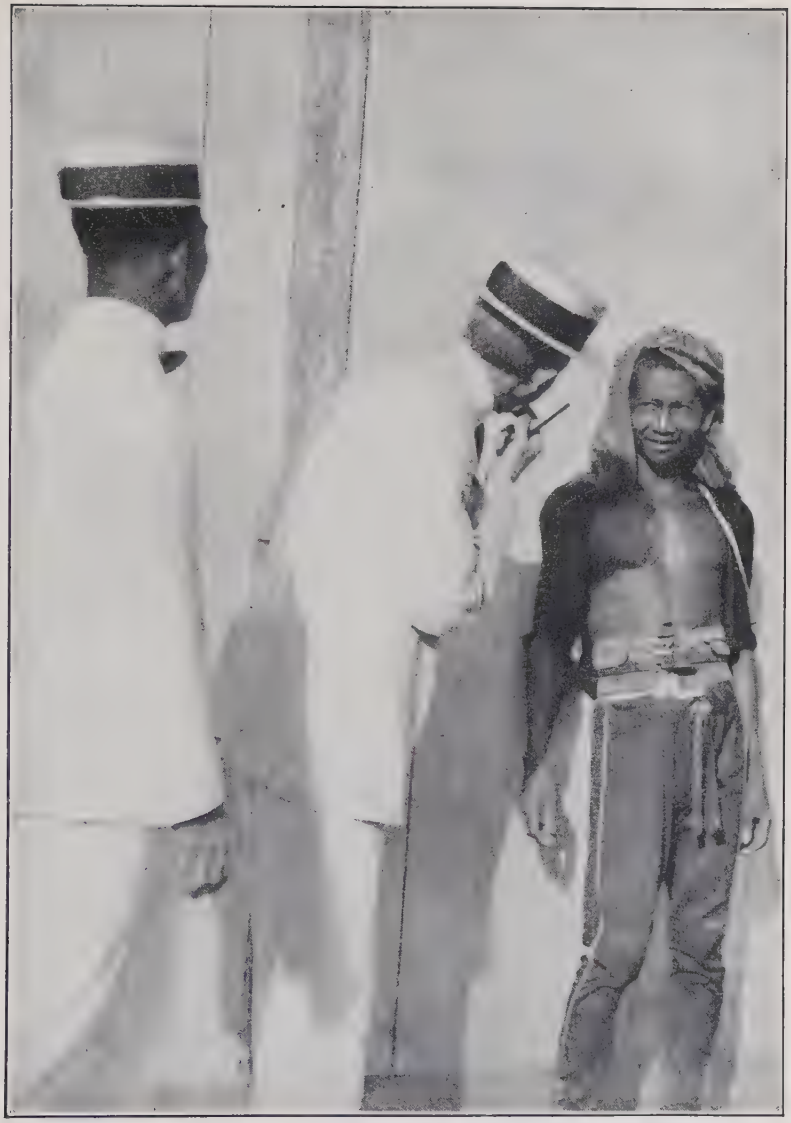
Twenty-five years ago we got most of our rubber from the wild trees of the forests of Brazil. Since then two great changes have occurred and the industry has been revolutionized. One is the cultivation of Brazilian rubber trees in great orchards, or plantations, in the Dutch and British East Indies; the second is the rise of the automobile and other industries which have multiplied many times the demand for rubber. In 1910 only seven thousand tons of plantation rubber were produced; to-day ninety-five per cent. of all our rubber comes from trees that have been set out.

Not only does practically all of the world's rubber now come from plantations, but the great bulk of these are located in one geographical area—southeastern Asia and the neighbouring islands. Of more than four million

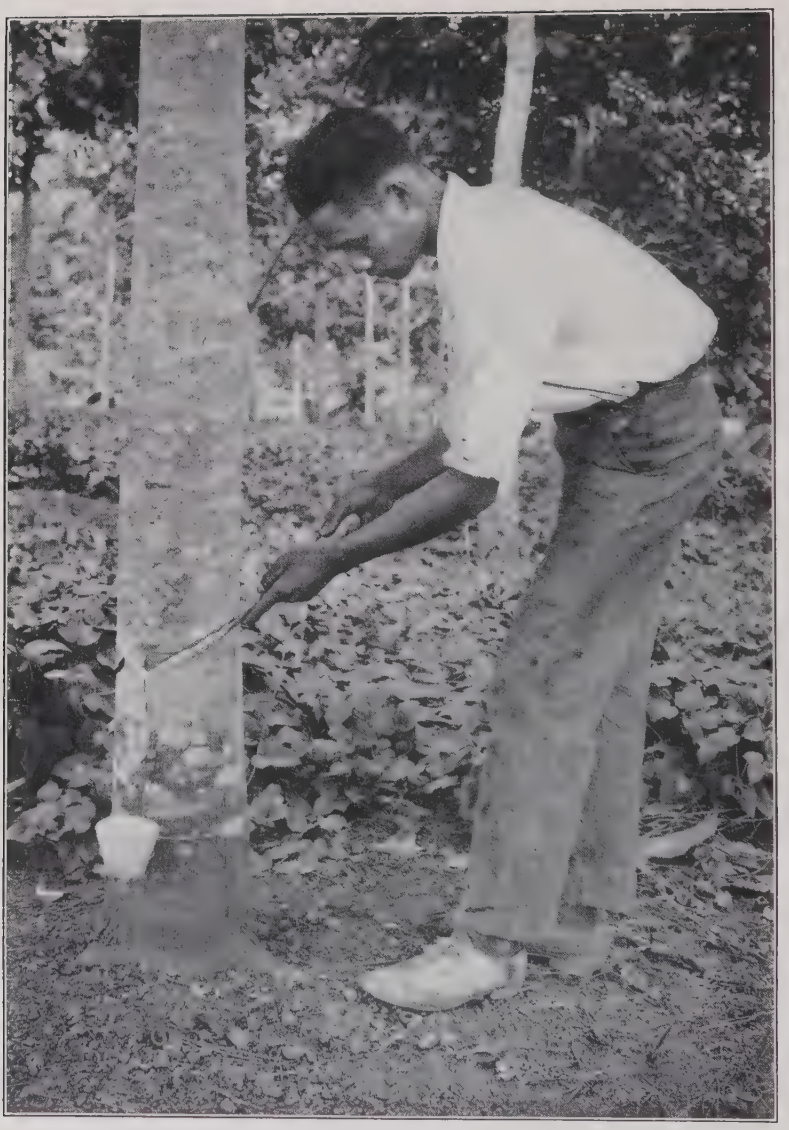
acres in that region planted to rubber trees, the British control in excess of two thirds, in Ceylon, India, and British Malaya, while the Dutch, in Java and Sumatra, control the greater part of the remainder. The Japanese, French, and Americans own a few plantations, but their investments are negligible compared to the nearly five hundred million dollars and the more than one hundred million dollars put into rubber growing by the British and the Dutch respectively.

After the war, with the slump in demand and with the new trees brought into bearing, the British planters saw themselves facing lower and lower prices and greater overproduction. Sitting in council with the British colonial authorities in London, the rubber planters considered schemes for stabilizing the industry and, incidentally, making us pay a good many more millions for our rubber each year; for we are the biggest users of rubber, producing practically none ourselves, yet buying every year about three fourths of the world output. Whenever the price of rubber goes up the people of the United States pay most of the bill.

The first plan tried was a voluntary restriction of output, but as neither the Dutch nor the small native planters would come into the agreement little was gained. Then, with the help of their government, the British growers got a law passed establishing a system of restricting exports. There was no restriction placed on production of rubber; a planter might grow as much as he liked. But a rising scale of export taxes was laid on rubber shipped out in excess of the schedules determined on, and it was believed the growers would not find it profitable to increase their output.



The Moro of to-day is a man of mixed blood. His forefathers were Malays from Borneo and adjacent islands, but for centuries they filled their harems with Filipino and even Spanish women captured in their raids.



The latex flows from a rubber tree at the rate of about half a cupful a day. On the Basilan plantation some of the trees yield as much as twenty-six pounds of rubber in a year, but the average is around seven pounds per tree.

Although prices rose at first when this plan went into effect, it did not prove a great success. The Dutch, having refused to join with the British, profited by the restrictions on production in Ceylon and Malaya. In 1923 they shipped from the Dutch East Indies thirty thousand tons of rubber more than in the preceding year, and made something like seventy million dollars additional profit. In fact, the efforts of the British to cut down production and their adoption of the plan for restricting exports served in itself partially to defeat their purposes. The world realized that the potential rubber output was in excess of the demand, and consequently buyers were in no hurry to lay in large stocks.

In the meantime, big men in our automobile and tire industries, alarmed for the future, explained to Washington the dangers of the situation. While, they said, there is now an over supply, consumption of rubber is increasing at a rate higher than the increase in production. A shortage within ten years after the end of the World War was predicted by some of the experts, and they urged the government to do all it could to lessen our dependence upon the British and the Dutch. Accordingly, investigators were sent out to the Philippines to see if large-scale rubber growing could be developed in the Islands. They came to Basilan, where I am now, went over the plantations I have visited here, and studied the possibilities of planting extensive areas to rubber trees.

Last year, almost six hundred million pounds were used in the United States. This amount is more than enough to give every man, woman, and child in our country a five-pound chunk, and about three times as much as was used in all the other countries of the world put together.

The manufacture of rubber has become one of the richest and greatest of our national industries, taking in something like $1,000,000,000 a year. Its rise began with the automobile in 1899 and it has grown by leaps and bounds every year since then. In that year we made less than 4000 passenger cars of a value considerably under $5,000,000. The automobile industry has since produced, in a single year, 4,000,000 cars and trucks, with a value of $3,500,000,000. The new cars and the 16,000,000 already in use require at least four rubber tires apiece, and these are now being turned out at the rate of about 50,000,000 a year.

Have you ever thought of a world without rubber? Suppose to-night every bit of it should be absolutely withdrawn from use. What would things be like when you waked in the morning? If it were raining or snowing, you would not dare go out for fear of the weather. There would be no rubber boots, rubber shoes, or mackintoshes, and before night the whole nation would sneeze. Every automobile, truck, bicycle, and motorcycle would have disappeared from the streets. For want of air brakes, the trains could not run. If a fire broke out in Chicago, the city would burn to the ground for lack of hose. You might go to your factory, but half the machinery would be dead; for there would be no rubber belting. In milling centres like Minneapolis the grain would stop moving; for it flows over rubber from the elevators to the steel rollers that grind it to flour. Without rubber insulation for their apparatus and wires the telephone systems would be paralyzed, electric lights would be useless, and the street cars would stop. In short, every industry would be crippled, and many of the activities of the nation would

come to a standstill. The men who wear suspenders would have to clutch up their trousers, while for lack of garters the ladies' "first national banks" would fall to the ground. Even the baby, crying for his bottle, might have to go hungry for lack of rubber nipples. You might explain the situation, but that would not quiet him. These are but a few of the things that would happen if suddenly we were deprived of our rubber.

As matters stand, in war or in peace, John Bull and the Dutch have us in the hollow of their hands. This is true, notwithstanding the fact that we have here in the Philippines thousands of acres of land which the rubber men and the scientists say are capable of producing all the rubber to be used by the world for all time to come. The tropical location within five hundred miles of the Equator is just right, and the region is outside the belt of typhoons that might blow down the trees.

The islands of the archipelago with the greatest rubber possibilities are Mindanao, Basilan, and Palawan, but there is no doubt that rubber can be raised on many lying between Mindanao and Borneo. It has long been grown with success in a small way in a number of places on Mindanao. The only commercial plantations, however, are here on Basilan, where two tracts, covering altogether somewhere between five and ten thousand acres, have been set out according to the same methods as those used in Malaya. Tens of thousands of the trees are now producing rubber for the auction markets of Singapore, whence it is sent to the United States and other parts of the world. The island is almost all cultivable, and I am told that the potential rubber land includes practically the whole area.

If you could bore a hole through the earth from the

United States to the other side of the world and fix your eye to it, you might see this little town of Isabela, where I am writing. The island of Basilan is the easternmost of the Sulu Archipelago, a continuous chain of islands, islets, and coral reefs, which is strung out from the end of the peninsula of Zamboanga to the northeastern extremity of Borneo. It is so near Zamboanga that I came over here in a steam launch from that town. It has an area of about two hundred and fifty thousand acres of hill, hollow, and little volcanic mountains, and is rich in timber. The hills are forest-clad to their summits and some of the trees are of great size, so that one of the problems of the rubber planters is to clear the jungle for the clean culture essential to success.

The population of Basilan is about twelve thousand, of whom perhaps one tenth are Christians. The remainder are Yakans, a Malay tribe and followers of a degraded form of the Moslem religion, who are largely employed to work the plantations; and the Samals, or sea Moros, who live chiefly by fishing.

Isabela, the principal town, is a ragged little settlement of thatched huts, a few frame buildings roofed with galvanized iron, an old Spanish fort, which serves as the municipal building, and a hospital set up on posts out in the sea. This hospital is just now filled with lepers awaiting their deportation to Culion. Before the Spaniards came to the Philippines the people of Basilan paid tribute to the Sultan of Sulu, but to-day the Presidente of Isabela is a Christian Filipino, and the island is part of Zamboanga Province.

I have visited both of the great rubber plantations on Basilan. I sailed around the island to the property of the

American Rubber Company, and spent some time on the Basilan plantation, several miles back from the coast on this side of the island. The latter is owned largely by Swiss capitalists living in Manila. The American plantation has been planned on a large scale, but its rubber trees are but five or six years old, which means that they are just coming into bearing. Here smoked rubber alone is made, being produced in the corrugated sheets about a foot wide and two feet long that form the bulk of the rubber of commerce.

The Basilan plantation has been in operation more than twelve years, and with its ninety thousand trees is to-day a paying proposition. It is turning out the beautiful crêpe rubber in long strips of white or cream yellow, which look for all the world like dress goods, save that they are about as thick as the blotting paper you use on your desk. The Swiss manager of the plantation came down to the wharf with his motor truck and acted as my guide. We shot out of Isabela over a red dirt road as smooth as a floor, and drove through the plantation for several miles. Now a great checkerboard of vegetation was spread out before us; now the squares turned to diamonds, and again we looked through what seemed a big park. Great rubber groves lined the road on one side and there were coconut groves on the other. All the trees are set out in regular order, and in every direction the rows of coconut or rubber extend on and on.

The coconut trees are numbered by tens of thousands and yield something like three million nuts every year. As we rode we could see the Samals and Yakans walking among the palms carrying poles thirty or forty feet long. At the end of each pole was a knife, with which they cut

loose the nuts high overhead. Other men were gathering the fallen nuts into carts, which the humped bullocks of Indian stock were dragging to the mill where they would be turned into copra and coconut oil.

In the rubber forest on the other side of the road the trees were tall and slender. Each of the silver-gray trunks was scarred at a point knee-high from the ground. Just beneath the scars on each tree we saw cups about the size of a wine glass fastened to the trunk with wire in such a way that the milky sap, or latex, dropped into them. Many of the cups were beer bottles broken off two thirds down from the top. These bottles were brought in during the World War when no pottery cups could be had.

Getting out of our motor, we walked among the rubber trees. A little long-haired Yakan scarred one of them for us. He cut the bark with a special kind of chisel made for the purpose, and as the knife ran along the tree the milk, as white as that fresh from a cow, oozed out into the cup. It came drop by drop, and only about a half cupful runs out in a day. The yield varies according to the tree and its age. There are some trees that yield as much as twenty-six pounds in one year, but the average is around seven pounds of rubber per tree. The milk must be collected each day while the latex is flowing, and men go from tree to tree with two- or three-gallon buckets.

We went back to the truck and rode to the factory to see the milk turned into crêpe rubber. I can best describe what goes on in this part of the plantation by comparing it with a sanitary dairy where the greatest of care is taken to keep everything clean. The factory is a big shed roofed with sheet iron and floored with concrete and tiles. Scattered here and there through it are concrete tables

with tops of white tiles fitted together as closely as those of your bathroom and quite as clean. Among these tables are vats about three feet wide, four feet long, and perhaps two feet deep. They have bases of concrete and are lined with white porcelain tiles. Into these vats the pure white milk is poured. It stays there for a while, till a foam comes up much like that of whipped cream. This is skimmed off, and acetic acid is put in to curdle the milk. Within a short time the latex has become a soft block of rubber which looks like goat's-milk cheese. It is from four to six inches thick and of almost the same length and breadth as the bottom of the vat.

This block of white cheese is taken out and laid on the porcelain table, where the brown-skinned workmen slice it up with great knives. The chunks are fed into steel rollers, which work much like those of a clothes wringer. The first rollers are heavily corrugated and the successive ones are less rough until the last are smooth-surfaced cylinders. As the rubber is fed in, all the moisture is pressed out and the product comes forth in sheets about a foot wide and ten or twelve feet long. It keeps on going through roller after roller, the sheets getting thinner and more compact at each turn of the wheel, until finally they become long strips of what looks like white or cream-coloured cloth, of the texture and appearance of crêpe. I can imagine Cinderella, when she went to the Prince's ball, wearing a gown of this soft creamy stuff. It is in this form that the rubber produced at the Basilan plantation goes out to the world; it needs only to be dried before it is packed up and shipped to the market.

The work is done efficiently throughout. Every bit of rubber is saved and the product is carefully graded. The

pure milk makes one kind of sheet, the washings of the cups go into another, while from the scraps of bark on which some of the rubber has coagulated, a third grade is recovered. The great plantation, with its scores of half-naked, long-haired, and almost savage workmen is as well managed as the big steel and concrete city factories that will use this product to make rubber articles. It may be that before the year is out the rubber I saw manufactured to-day will keep the wife of a millionaire from feeling the bumps in the pavement as she rides in her limousine along upper Fifth Avenue.

As to just how far the Philippine rubber industry can be developed, I cannot say. As pointed out by the investigators sent here by the United States government, there are many practical problems to be considered in trying to establish rubber growing on a large scale. Both the climate and the soil are entirely suitable, but the question of labour is an adverse factor. In the Dutch and British plantations of the large-scale modern type, wages alone make up forty per cent. of the cost of bringing an acre of rubber into bearing, and labour represents a similar proportion in gathering the yield from the trees. Wages in the Philippines are more than twice as high as in Java and Malaya, so that, with the present prices for rubber, growers in the Islands are handicapped at the outset. Moreover, the laws in the Philippines regarding land ownership and other matters, together with the uncertainty as to the future political situation, make our American capitalists a bit timid about coming out here with their millions and putting them into rubber lands.

Many of the rubber gatherers on the Basilan plantations are Yakans, the natives of the island. They are nominally Moslems, but still observe many degraded pagan rites and are a most backward people.

"I took up a sheet of the creamy crêpe rubber which had been made from the milky sap collected from the trees. In a few months it may be in the tires of a limousine rolling down Fifth Avenue."

CHAPTER XXIII

MOTORING ACROSS JOLO

RATTLING across country in an ancient car with a guide wearing a 45-calibre revolver slung to his hip and a chauffeur armed with a knife in his belt. Passing at every turn of the road parties of men in turbans, tight trousers, and gay jackets. Stopping now and then to visit Moro chieftains whose wives and retainers farm their lands, and paying a call on the Sultan of Sulu. These are some of the incidents of my trip on the island of Jolo to-day.

Driving out of the old fortified city of Jolo through a gate in the walls, we rolled over a macadam road as smooth as any around Washington. We went up and down hill to Maibun on the south coast, a ten-mile stretch that was like a great park all the way. After leaving Jolo we entered a carefully tended teak forest, then drove past hemp plantations. Again we flitted by rice fields in which turbaned Moros were ploughing with their carabaos. I noticed watch houses in some of the unploughed lands. When the rice is ripe, children sit in the little towers and pull strings to which bunches of streamers are fastened so that they will sway and frighten away the birds. During the whole drive we were in sight of mountains, peaks that looked to me as high as those of the Berkshires. Our chauffeur told us the names and traditions of some of them.

"That," said he, pointing to a high mountain on the right, "is Tumatangas, the mountain of tears. It is called that because it is the highest peak on the island and is the last bit of their home land that the natives see as they sail away on the ocean. It is then that they weep the hardest."

It is not easy for me to imagine a Moro in tears, but I can appreciate the sentiment whenever I look about me on this beautiful emerald isle. Here the grass does not grow dry and parched as in Luzon, Cebu, and Negros, and the trees are green the year round. The island of Jolo, or Sulu, as it is often called, is a part of the Sulu Archipelago, which consists of some two hundred and fifty islands and islets. The most important islands of the group are Basilan, Tawi Tawi, and Jolo. Jolo is thirty-seven miles long and has an average width of ten miles. The principal town is also called Jolo. The Spaniards captured it from the Moros and erected about it a wall eight feet high with loop-holes for rifles. Once a band of Moro *juramentados* in a frenzied attempt to regain the town kept trying to rush the wall until their dead bodies blocked up these slits. The wall, which could easily be battered down by a cannon, was intended to protect the Spaniards from the lances and arrows of the Moros. For a long time the mortar on its top was stuck full of broken wine bottles, which cut the fingers of the pirates when they tried to climb over.

When I first saw Jolo it had one thousand inhabitants. It has now six thousand or more, and is one of the most beautiful of all the towns of the Philippines. Its wide streets are shaded by gigantic trees, the limbs of which meet overhead in a series of arbours that protect one from the blazing midday sun. The main street ends in the

government pier running out into the ocean. There are small parks filled with tropical trees and flowers.

Although it is the heart of Moroland, Jolo belongs to the Filipinos rather than the Sulus. Its two-story houses with wide balconies over the streets are mostly the homes of Americans, Chinese, and Filipinos from other islands. The people live in the second stories, the lower floors being given up to stores or warehouses. It is cooler upstairs and the wide balconies, which are roofed over, are pleasant places to sit of an evening. The town is right on the sea, and some of the houses are built out over the water so that when the tide rises half of the lower story is flooded and the household refuse goes forth with the ebb. Jolo is the headquarters of the Philippine Constabulary, which polices the island.

According to an Arabic manuscript in the possession of Hadji Butan, the former prime minister of the present Sultan, the first of the Sulu people was Tuan Mashaika, who sprang from a stalk of bamboo and started the race. By others he is supposed to have come here with Alexander the Great who, they say, once conquered the Islands. The Sulus seem to have been of Hindu-Malayan origin, but along about 1450 Abu Bakr, who claimed descent from Mohammed, landed here and married a daughter of Rajah Baginda. He built mosques, and converted the people to Mohammedanism.

Even as far back as that the Sulus were pirates. It is known that the Rajah of Java sent the Rajah Baginda two elephants as a part of his annual tribute, and it is said that about the same time the Rajah of Manila included in his forced gifts to the Sulu Sultan slaves of six different colours. The red-eyed slaves were put on the western end of this

island, the white-eyed in the section just east of Jolo, the black-eyed in the middle of Jolo, and the blue-eyed at Luuk in the east. At that time not a single island of the Philippines was safe from these marauders, and they continued their piracy long after the Spaniards came in. For more than three hundred years war was waged between them and the Spanish, and when we took possession of the Sulu Archipelago the Spaniards had been able to hold only a few walled towns here and there.

In motoring across Jolo I was especially interested in the fruit trees we saw all along the way. Some of them towered up fifty feet before they thrust out bunchy branches that looked like green haystacks floating in the blue. One of them was the durian, which bears a fruit as big as a football covered with green spines like the quills of a porcupine. A single durian often weighs eight or ten pounds, and falling from the tall tree, it is dangerous to any one passing beneath. Cutting open the ball you find within a flesh as white as vanilla ice cream, inside which are one or two dozen seeds, each almost as big as an egg. These seeds are light brown and covered with half an inch of white flesh, the edible part of the durian. You pick out the seeds and suck off the pulp. It has a sweet, nutty flavour, and is so nutritious and invigorating that it is said to restore their youth to old men, and to bring children to families who have had none before. It is a favourite fruit among Filipinos of all classes, and commands a high price in the markets.

But the most impressive feature of the durian I have omitted to mention. It tastes somewhat like a banana, but as for its odour, that of limburger cheese is a delicious perfume beside it.

Jolo, the capital of the Sulu Archipelago, consists of a picturesque little walled city only about five hundred yards square, with a considerable town outside. The walls were built by the Spaniards after they captured the town from the Moros.

The Bajaos of Jolo live sometimes in boats, sometimes in huts built over the water. They say that they get ill if they stay more than a few hours away from the sea that gives them their living.

In front of nearly every house we passed we saw yellow papayas growing on trees as high as a two-story house. These trees have no branches and the fruit grows right out of the bark under the leaves. Sometimes there are as many as one hundred and fifty papayas on a single tree. Each fruit is about the size of a squash.

As we went on I noticed that the highway was filled with people of all ages and conditions. There were children trudging along, bearing on their shoulders bamboo tubes from six to eight feet long and as big around as my arm. The tubes, which were poised at an angle of forty-five degrees, looked heavy, and no wonder, since each contained four or five gallons of water. In Sulu, bamboo takes the place of tin or pottery for containers. In parts of the Islands the Christian Filipinos carry their coconut wine in such bamboo tubes, but the followers of the Prophet in Moroland are supposed never to have spirituous liquors.

Sometimes we passed a family taking produce to the market. I took notes of the costumes in one such group. The man wore a bright red turban, a tight shirt buttoned to the neck, and tight purple trousers fastened with shining brass buttons about his ankles. His wife, who carried her half-naked infant astride her shoulder, had on a long-sleeved jacket with a deep opening in front, and a kind of baggy divided skirt falling almost to her bare feet. The older children were tagging along after their parents, carrying vegetables and fruits and laughing and talking as they walked.

When we stopped at a market by the roadside we saw some Bajaos, or sea gypsies. They are rovers, living in dirty, verminous boats. Sometimes as many as eight people will crowd into one boat, doing their cooking and

even some weaving in the cramped space. The Bajaos say that they get ill if they stay on land more than a few hours at a time, and I am told that if one of them is ashore and sees a storm coming up he invariably hurries back to his boat because he feels safer there. A few of the Bajaos live in rude shacks built over the edge of the sea. The roofs of such huts are only about three feet above the floors, so that the occupants sometimes become humpbacked.

It was pitiful to see the small stocks of the market vendors. For instance, on the ground before one huckster there were five piles, each containing fifteen peanuts. The whole business would bring about five cents. The betel-nut stands were selling packages of leaves at a cent apiece, while the corn peddlers were letting their piles of tiny ears of corn go at half a cent each.

But not all was primitive on the highway. We passed motor trucks filled with passengers and freight going into Jolo, and private cars belonging to Filipinos, Americans, or wealthy Moros. One motor truck went by us loaded with Filipino soldiers. In this part of the Islands the members of the Philippine Constabulary are much in evidence. We also saw three or four schoolhouses, which I was told by the chauffeur were attended by Filipinos and Moros together. He said, too, that some Mohammedan girls were going with their brothers to the schools. Since coming to Jolo I have met one of the American supervisors who looks after some forty or fifty of the schools here. He is nearly always on the go in motor launch, sailboat, automobile, afoot, or ponyback, visiting one school or another. He tells me that in his opinion one reason that the practice of polygamy was dying out

among the Moros even before it was barred some years ago, was the fact that the girls who went to school learned of customs in other countries and objected to their husbands having more than one wife. Again, wives were becoming more and more expensive and the younger men of Moroland found that one was about all any man could handle and keep happy.

Speaking of keeping a wife happy reminds me of a story told of General Hugh L. Scott when he was military commander of Sulu. The wife of an official of the Sultan's court, who had left her husband, had gone to the United States army headquarters demanding protection. Almost on her heels came her lord and master, roaring that she must be returned to him immediately. Well, it was not as simple as you might think. It would not do to antagonize a court official who had a following. Neither did it seem quite proper to give the lady back to a cruel husband. But Scott proved equal to the occasion. Recalling the natives' fondness for dress and ornament, he asked the man how long he had been married to the woman, and whether she was a good wife, dutiful and industrious. The man replied that they had been married for eleven years and that his wife had been all that she should be to him. Scott proceeded with his inquiry.

"Ever buy her any head-dress or ornament?" said he.

"No," answered the man, in surprise.

"What?" said the General. "Lived with her all those years and never bought her anything! I give you one hour to take this woman to the stores and buy her a hand-mirror and anything else that you think would please her. Then come back here and tell me how you feel about things."

In an hour the Moro and his lady returned with their arms about each other and their faces wreathed in smiles. She carried a hand-mirror and wore a brilliant pink sash knotted in the latest fashion.

Some of the older men, particularly the wealthy ones, still have harems. I made a detour on this trip so as to call on Datto Mamma, one of the richest of the Moros in Sulu. He has seven or eight thousand acres of land, much of it planted to coconuts, and he told me that he had a thousand men working for him. I knew that he had ten wives and had hoped to get them all together so as to photograph them, but the old man told me that none was at home. He had sent the whole lot into the rice fields to set out plants in the mud. His two daughters, who were in the house, showed me over their dwelling, a big two-story building with a thatched roof. I noticed that the bamboo floor was the family sleeping place. There were plenty of pillows, but the bedclothing consisted only of woven mats.

While marriages among the Moros here are not matters of bargain and sale, every man who gets a wife is expected to give her parents a present in cash. Among the well-to-do, custom has fixed this at about two hundred and fifty dollars. The other day I heard the story of a school boy who had not that much money. The young lovers planned that he should carry off his sweetheart as she went to her bath, in the hope that after the consummation of their marriage the parents would consent to a reduced rate. The scheme worked and the man got his bride for seventy-five dollars. Since there is no separation of the sexes in the schools, there are more love matches among the Moros than in most Moslem lands.

Even when in undress the Moro datto, or chieftain, does not unsling from his hip the kris that is the special badge of his rank. On dress occasions he wears jacket and trousers decorated with dozens of glittering buttons.

The Moro housekeeper does not worry to buy pails, for an abundant supply of bamboo for water tubes grows right at her door. The women, although Mohammedans, go about unveiled and are altogether much freer than those of other Moslem regions.

The groom pays for the marriage feast, which is often expensive. The bride's father usually performs the ceremony, though he may employ a priest. First the couple are purified by ceremonial washings as if they were getting ready to go to the mosque. Then the bride's father or the priest grasps the right hand of the son-in-law to be and recites certain passages from the Koran. Finally, he asks the groom if he accepts the woman for his wife. The wedding guests burst into a chorus. Meantime, the bride with eyebrows shaved and with her face thickly coated with a yellowish substance, is in a room where the groom cannot see her. When he goes to look for her she tries to escape, but after a game of hide-and-seek through the house he overtakes her. It is the bride's part to try to beat and bite him, but I don't imagine she offers any really serious resistance. At last he passes his right index finger over her forehead and the marriage ceremony is completed. The pair do not live together, however, until the seventh day after their wedding.

CHAPTER XXIV

THE SULTAN OF SULU

ON MY first visit to Jolo I had an audience with the Sultan of Sulu, who wrote for me in Arabic a message to the people of the United States. The words looked like hen tracks and the lines went across the page from right to left instead of from left to right as with us. In the letter he said that he hoped that the American occupation would result in peace for his people and that his islands might thereby become happy and prosperous. This was written on the "eighteenth day of the Moon, Ramadan, in the year of the Sultan, 1317," and it was signed "Hadji Mohammed Jamalul Kiram II."

In the drive across Jolo to Maibun to-day I had a chance to observe some of the material effects of American administration in what was once the Sultan's domain, but I was still more interested to see if the man himself was much changed. At my former audience he was in great state. There was a guard of Indian soldiers at the gate of his palace. The Raja Muda, or crown prince, stood at his back, a bolo on his hip, and on each side were dattos and chiefs, who looked like a gang of cutthroats. The Sultan was dressed in a business suit of European cut and wore a turnover collar fastened by a button of gold. He had on a blue velvet cap six inches high and his fat hands were covered with rings set with pearls as big as grains

of Indian corn. For sceptre he carried a gold-headed cane.

I took lunch with him and afterward met his mother, the real power behind the throne. She was a woman of exceptionally strong personality and so much influence that General Bates thought it expedient to appease her with presents of money. In return the Sultana presented the General with a satin embroidered jacket and the purple trousers of her dead husband, saying: "Although my house is poor and broken down it will always be at your disposal."

When I talked with the Sultana she was seated on a divan with one leg under her in front of a table covered with red flannel. Upon the table was a betel box inlaid with silver, from which she now and then took a chew. Two slaves stood behind her and one of them held under her chin the inevitable metal cuspidor which she frequently needed.

To-day His Majesty was attended by no retinue. With him were but a single retainer and two of his wives. The latter were young women of a gingerbread hue with long black hair, big brown eyes, and teeth and gums the colour of highly polished jet. Like the late Sultana, each had a betel cud in her mouth.

The Sultan was clad in olive-drab coat and riding trousers. The latter buttoned tightly above his ankles. In place of leggings or puttees, he had on green silk socks held up by white elastic garters worn outside his trousers. He wore white canvas tennis shoes and had a green velvet cap on his head. His trousers were held in by a string around his waist.

When I met the Sultan before, he was in the thirties.

He is now past fifty, but I cannot say that his appearance has changed much. He has a round full face, with nose slightly flattened, and a pock-marked, light brown skin. He still speaks little English, but he remembered my former visit, and through an interpreter I got a few words from him about independence for the Philippines. He made it plain that he does not want the Christian Filipinos to rule the Islands and asserted that he ardently hopes to go to Washington soon and present the Moro case to the President.

Should he make the trip it will not be the Sultan's first visit to the United States. Some fifteen years ago he created a sensation in America when he went over to see General Hugh L. Scott, who as administrator in Sulu had won his confidence and whom he called his "father." Before he arrived there was a story that he was bringing two hundred and fifty thousand dollars' worth of pearls along, but when he landed he said he had sold most of them on the way, and that he had with him only the magnificent gem in the ring he was wearing. One pearl alone, it was rumoured, had brought nine thousand dollars in London. With him were his brother, the Raja Muda, and a suite of four others. The Sultan and his brother crossed the Atlantic in a comfortable cabin, but the retinue had to go in the steerage, as no other accommodations could be had for them on the steamer that the island potentate had insisted upon taking.

The Sultan brought with him a bright red uniform, stiff with gold lace and decorations, for which he had paid fifteen hundred dollars in Singapore. When he took it back from Singapore to Jolo he had to pay five hundred dollars duty on it, but this was afterward refunded to

him by the order of Governor-General Wright. He brought, too, the ivory-headed cane that General Scott had given him, saying that not even the President himself had one so handsome. The Sultan was enormously proud of the gift, declaring he was certain that his rival, the Sultan of Johore, across the way from Singapore, had nothing to touch it.

After arriving in New York and taking up his quarters at a Broadway hotel, one of the first things the Sultan wanted to do was to go to the Times Building at Forty-second Street and Broadway. General Scott had once sent him a framed picture of the building, which was the chief ornament in his palace at Maibun. When he drove past the theatre where George Ade's musical comedy, "The Sultan of Sulu," had had such a good run some years before, he was disappointed to learn that there was no chance for him to see it. He thought a special performance should be given for his benefit. After a short stay in New York the Sultan went down to Washington, where he had an interview with President Taft, and soon afterward he resumed his tour of the world.

It was this same sultan who, you remember, was reported to have proposed to Miss Alice Roosevelt when she visited the Philippines while her father was President. It was then the gossip that His Highness offered to make a Sultana of the pretty young visitor, but this is what really happened on the occasion when he met her: Next in power to the Sultan was his brother, the Raja Muda, and next to him was a wealthy Moro, Datto Jokonian, who had formerly been at war with His Majesty. When the Sultan was presented to Miss Roosevelt in the ballroom of the Officers' Club at Jolo, this hated rival was

seated beside him. As the Sultan was introduced he bowed profoundly and said a few words of greeting through an interpreter. But when Jokonian's turn came the datto fished in his pocket and produced a beautiful pearl, which he gave the young lady with a graceful speech. The Sultan hung his head in mortification. It had not occurred to him to bring a gift with him. But he was not long at a loss. Drawing from his finger a ring set with a splendid pearl, he presented it to Miss Roosevelt with the compliments of the Sultan of Sulu. This is the true story of the incident from which grew the absurd report of the proposal.

In these days the Sultan must have been a very wealthy man, for not only had he an income from the Spanish and from the British North Borneo Company, but he also controlled the pearl fisheries in the waters about his archipelago. Following a custom long established, the pearlers paid for fishing privileges by either giving His Majesty or selling to him at nominal prices the biggest of the pearls they discovered. When I was here before I heard a story of the Sultan's keeping a big box of pearls under his bed, against the day when he would sail over to Singapore and sell them.

Until they left the Islands the Spanish paid the Sultan twelve hundred dollars a year, while each of the leading dattos of his domain received three hundred. This, according to the treaty with Spain, was "for injuries previously inflicted on the Sultan's people." The British North Borneo Company paid him twenty-five hundred dollars a year as it still does, I believe, in return for its leases of land in the near-by island of Borneo.

When we took possession the Sultan of Sulu had many

slaves, whom Colonel Scott told him he must free. He begged hard to keep them, saying that the Colonel did not make him give up his horses; why, then, should the emancipation of his slaves be insisted upon? Free them he did, however.

Nowadays the Sultan can no longer claim all the big pearls in the waters about his islands. He has been stripped of political and military power in the Sulu Archipelago, though he is the spiritual head of all the Moros in the Philippines. Still, I should think he could get along very well with his income of twenty-five hundred dollars from the British company and of six thousand dollars from the United States, to say nothing of the profits from his lands, which are farmed by his retainers, and the contributions from his own people, many of whom still regard him with great reverence. I am told that he keeps himself comparatively poor by gambling whenever he has any cash.

Sultan Jamalul Kiram II is of blue blood. He has a genealogy six hundred years long and he can reel off the names of his ancestors for three hundred years back. In Singapore and in that part of Borneo which he leases to the British company he is treated as a monarch, but even when we came in he was not by any means absolute in the Sulu Archipelago, for the Spaniards had reduced him to the position of a "protected" ruler. The ports of Jolo, Siasi, and Bongao were considered Spanish territory.

In 1899 the Sultan made a treaty with General Bates, which failed of adoption in our Senate because it recognized polygamy. Relations between the Philippine government and the Sultan remained in a rather unsettled state until Governor Carpenter straightened them out.

Then in 1915, after eleven days and nights of negotiation, the Sultan signed an agreement whereby he renounced for himself and his heirs all political power over the Sulu Islands, including the rights to collect taxes and decide lawsuits, and the reversionary right to all lands. For our part, we agreed to recognize him as head of the Mohammedan religion in the Philippines, gave him a grant of land in Jolo, and pledged ourselves to continue for his lifetime his pension of twelve thousand pesos. One part of this agreement bars polygamy. It states that:

> The Sultan of Sulu and his adherents and people of the Mohammedan faith shall have the same religious freedom had by the adherents of all other religious creeds, the practice of which is not in violation of the basic principles of the laws of the United States.

The Sultan is a much more sophisticated individual than the man I met a quarter of a century ago. I remember, for example, his surprise when, after the Jolo ice plant was started, one of the crystal blocks was put in his hand. He dropped it as though it were red-hot iron and it was some time before he could be persuaded to take a drink of ice water. After his first glass, however, he wanted to drink all the time, and every native of his party absorbed a gallon or more. The Sultan wanted sugar in his ice water. Later he tasted ice cream, but thought it too cold and took cake instead.

He was amazed that electric-light globes did not burn his hands, and when an electric fan was started in his presence for the first time he had to be warned to keep his hands off. He was astonished at the telephone installed on one of the ships, and after he had listened to it he and the others in his party went around the vessel putting their ears against every projection they saw.

"The Sultan of Sulu was interested when I showed him what I had written about him on my first visit to Jolo, twenty-five years ago. Then he was in great state; now he has been stripped of his political power."

The pearl fishing of the Philippines centres about Jolo. Once the pearlers had to pay for fishing rights by giving the Sultan of Sulu the biggest pearls they found, which he converted into cash at Singapore.

One of the ships had a phonograph which General Bates had brought in. This was shown to the Sulus, among others the Raja Muda. The Moros were allowed to talk into the phonograph and were greatly surprised later when they heard the machine reproduce what they had said. Soon after, one of them went to the mouth of a six-inch gun and shouted into it some passages of the Koran. He then put his ear against the gun and waited for a reply. The Raja Muda spoke a message into the machine to Datto Tantong of Bongao and when that datto heard the words of the phonograph he recognized the voice of his friend and thought the crown prince had died and that this was in some way a message from Allah. General Bates gave the phonograph to the Sultana, and when I met the old lady she begged me to ask that more records be sent to her. During my present visit here I have again met the Raja Muda. On the walls of his house at Maibun where we talked was a telephone, which connected him with various parts of the island, while the Sultan is now as accustomed to modern conveniences as you or I.

CHAPTER XXV

DAVAO, LAND OF MANILA HEMP

DAVAO, where I write this, is my last stopping place in Mindanao and the southern islands of the Philippines. From Jolo I returned to Zamboanga, and thence sailed to the east for three hundred miles. I rounded the province of Cotabato and after bending southward to within about three hundred miles of the Equator, turned to the north and steamed up Davao Gulf almost to its head.

My boat kept near the coast, and we had mountains in sight all the way. The country grew more rugged as we went toward the east, and I am now right under the shadow of Mt. Apo, the highest of the Philippine peaks. Its enormous crater threatens at any time to break out into eruption. As I write I can see great clouds of vapour rolling out of its side, and early this morning I noticed that the vapour was shot through with flames.

The lower part of Mt. Apo is wooded, but the summit is bare and looks chalk-like in the distance. On the south side there are no trees whatever. The land at the foot of the mountain slopes down toward the gulf and is a natural pasture covered with a rich growth of grass.

The country surrounding Davao is almost a wilderness. The jungle begins only a short distance back from the town, and a walk of a few miles in any direction brings

one into a forest alive with monkeys, parrots, deer, and wild hogs. There are monkeys everywhere, some of them tailless, and some little ones no bigger than my two fists. The parrots are of many colours, the most common being large white ones with tufted heads that fly about in flocks of twenty or more. Another species is bright red with iridescent green wings. This is not so large as the white parrot, but it is a great whistler, singer, and talker. Then there are doves with golden brown bodies and green wings, white snipe which fly along the shores, and a great bird as big as a turkey and not unlike one. There are white herons, and wild pigeons three times the size of our pigeons at home.

I wish you could take a walk with me through the little town of Davao. It is like a botanical garden. Imagine thousands of tall palms waving their fan-like leaves in the air above rows of thatched cottages built along wide, level streets. Let some of the palms have clusters of coconuts hanging to them and let others be loaded with the round green and yellow nuts of the betel. Let there be banana groves here and there and patches of nipa, with their great fern-like bunches of leaves, each fifteen feet long and a yard wide, sprouting up from the ground. Let there be flowers of strange shapes and colours. Hang an orchid here and there upon a dead branch, and under all put a turf as thick and as green as that of the blue grass country of Kentucky, and you have some idea of Davao.

The little nipa-thatched, basketwork houses are set well back from the street, some of them fenced off by sapling stakes driven into the ground. The stakes are put in green, and it is an evidence of the richness of the soil that they soon sprout branches and leaves. There are

no gardens about the houses, no beds of flowers, nothing but grass and trees of various kinds.

One of the commonest of the trees is the mango, which here grows as big as the giants of our forests and which is now loaded with fruit. The boys and girls may be seen everywhere throwing clubs into the branches of these trees to knock down the luscious yellow fruit, just as our boys gather apples.

I think I shall always remember Davao best for the fact that when I was on my first visit to the Islands it was here that I was offered four slaves for fifty gold dollars. They were owned by a woman who claimed to be a Christian. I went into her house and chatted with her for some time about the human flesh she was offering for sale. The slaves were black Negritos, three of them boys, ranging in age from sixteen to six, and the other a girl of twelve, the age at which girls are sometimes married down here on the edge of the Equator. The smallest boy had on nothing but a shirt, which barely reached to his waist, and the other two wore only coarse pantaloons. The girl was practically naked, her sole garment being a wide strip of dirty cotton cloth wrapped about her waist and fastened there in a knot. The slave owner evidently thought I wanted the girl and said she was "*Mucho buena*," or "Very good," but told me that if I bought only this child she would have to charge me more in proportion than she asked for the job lot. She said the little girl was worth at least fifteen dollars, and seemed surprised when I did not jump at the bargain.

Of course, all traffic in human beings was stopped under American rule, and there is not even a chance of my being offered a slave on this visit. I understand, however,

The Philippines are the only source of Manila hemp, or abacá, which yields the longest and strongest cordage fibre known. Its tensile strength is about double that of Mexican sisal, its chief competitor in the United States.

Stripping Manila hemp consists of pulling under a knife blade the ribbons peeled from the abacá stalks. The knife is on a spring and scrapes off all the pulp, leaving the clean, strong threads of fibre.

that slavery of a sort does go on *sub rosa* in the interior.

The province of Davao lies on the east and south coasts of Mindanao and is, so to speak, on the back of that island with reference to Zamboanga, Manila, and the chief ports of this part of the world. It is nearly as big as the state of Massachusetts, but I doubt whether its cultivated portion is anywhere near half the area of Rhode Island. The country is almost all wild. The mountainous portion is covered with forests, sprinkled here and there with strips of rich grass which is excellent for grazing. The cattle of this region are like those I saw about Zamboanga, cross-breeds of the native stock with humped cattle imported from India, because they are immune from rinderpest. The animals, which look like Jerseys, give milk in small quantities, though of the richest quality. The people do not use the milk for cheese or butter, but let the calves run with the cows.

Davao is best known, not as a cattle country, but for its Manila hemp. As any schoolboy can tell you, this is one of the chief products of the Philippines, and Davao alone exports enough to furnish hangman's cravats for the whole human race. It is brought in from the country and many a Chinese merchant has made his fortune by dealing in it.

We pay every year between twenty and thirty million dollars for the Manila hemp we use. Most of it is made into rope of various kinds from clothes lines to cables. Some of it goes to the Northwest to help the wheat growers harvest their crops, though the greater part of our binder twine is made of the weaker sisal, or henequen, fibre of Mexico. Some of it is employed in working our mines and in drilling our oil wells. It is made into hammocks,

it is used for nets, and it goes into making hats, tapestry, and carpets. From the waste and old ropes Manila wrapping paper is manufactured, and here in the Islands the fibre is used to make baskets, hats, slippers, and a coarse textile for clothing.

The Philippines have a monopoly on Manila hemp, which is the longest and strongest cordage fibre in the world. Its tensile strength is about double that of Mexican sisal, its chief competitor in the United States. Attempts have been made to raise it in India and elsewhere, but so far none has been particularly successful, though small quantities are now being grown in Java and Sumatra. The hemp business of the Islands represents millions of dollars in investments and I have been told that it provides a living for more than a million Filipinos.

I find that the plant grows in most of the Islands. Nearly everywhere I have been I have seen hemp spread out to dry in the streets of the towns, and out in the country have often passed men taking loads of the fibre to market, sometimes in bullock carts and sometimes on their own backs. In the province of Albay in Luzon the people are supported almost entirely by hemp, while the whole island of Leyte is full of hemp plantations. The best quality grows down here in the province of Davao.

I spent this morning going through one of the biggest of the hemp estates in Mindanao. After I entered it I kept close to my guide, for it was so large that otherwise I might have lost myself in it and spent days trying to find my way out. There were thousands upon thousands of the plants, making a veritable forest, or rather jungle, in which there were neither roads nor paths. They were about ten feet apart and from

twelve to twenty-four feet tall, and shaded the ground so that we walked in semi-darkness although it was midday. Now and then we came upon a coconut tree, but as a rule there was nothing but hemp, hemp, hemp. If you have ever seen a banana plantation, you will have a good idea of what this Manila-hemp jungle was like.

The hemp plant, or abacá, as it is always called in the Philippines, is a species of the same family as the plant that produces the edible banana and is not really hemp at all. Its leaves are like banana leaves and its fruit is not unlike the banana, though it is full of black seeds and not good to eat.

The manager told me that abacá thrives best upon a hillside where there is plenty of moisture. In setting out a plantation in Davao the land is first cleared, although in Luzon many of the larger trees are left standing in order to shade the young plants. The ground is next burned over and is then ready for planting with sprouts which are usually suckers taken from an older plantation. One shoot goes into each hill, and there are generally a thousand hills to every two and a half acres. Of these about eight hundred are productive and two hundred or so must be replaced every year. At the same time that the shoots are set out, sweet potatoes, cowpeas, or other cover crops are planted. These soon spread over the ground, preventing the growth of weeds. When the abacá grows up and spreads its own leaves their shade keeps down the weeds. The mature plant consists of a cluster of from twelve to thirty stalks in all stages of development.

By the time they are two or three years old the plants are ready for the first harvest. After that they can be cut right along throughout the year, at intervals of from

four to six months. The cutting is done when the stalks are just about ready to blossom, and as abacá blooms the year around, the grower can keep busy harvesting and does not need to worry about losing his crop, as is sometimes the case with sugar and rice.

After the cutting has begun, each hill is valued at around fifty dollars and has a life of from ten to twenty years. A yield of one thousand pounds to the acre is considered a good crop, but the average is considerably below this figure, and, of course, the price per pound fluctuates a good deal.

At the plantation I visited, the manager had his men go through with the various processes so that I could see just how abacá is harvested and made ready for market. First, one of the labourers, armed with a razor-edged bolo, cut several stalks. These stalks varied from six to fifteen inches in diameter and were as crisp as iced celery. Upon examining them closely, I saw that each consisted of a fleshy central core about which were wrapped a number of thick, overlapping sheaths, or leaf stems. The fibre is in the outer layer of the sheath.

As I looked on a man took a sharp piece of bone and inserted it under this outer coating, peeling off from it a ribbon a few inches wide. After he had peeled off three or four of these ribbons, he scraped away the pulpy stuff beneath, then went on to repeat the peeling process on the sheath below. He kept on until the stalk had been stripped down to the core and the ground was covered with fibre ribbons.

The next process is called stripping and consists in separating the fibre from the pulp in which it is embedded. The labourer picked up the ribbons and carried them to a

After stripping, the abacá fibre is hung up to dry and is soon ready to ship. Most of it is exported in the raw state to Great Britain, Japan, and the United States.

Mat-weaving is one of the few crafts of the Subanuns of Mindanao. These people make forest clearings, cultivate them with pointed sticks, raise a crop or two before cogon grass takes possession, then move on and repeat the process elsewhere.

log set up in a horizontal position several feet above the ground, with a knife blade on top of it. The blade worked on a spring attached to a treadle. Pressing down the treadle so as to raise the knife, the man inserted one end of a ribbon, then let the blade spring into position on it. Using all his strength, he pulled back on the abacá and as it came under the knife all the pulp was scraped off of half the ribbon and only the fibre came out. He wound this on a stick, inserted the other end of the ribbon under the knife, seized the stick in both hands, and pulled back once more. If he had tried to pull the fibre with his naked hands they would have been fearfully cut by the strong threads.

Once the fibre has been stripped, it needs only to be dried in the sun before it is ready for market. My guide told me that the quality of the hemp and the price it will bring depend largely on how well the stripping is done. Saw-edged blades, for example, do the work faster and more easily but, unless the teeth are very fine, they leave bits of pulp clinging to the fibre which turn it brown and spoil its whiteness. He also said that stripping is most exhausting labour, and workers are frequently ruptured by the strain of pulling. For this reason, if he is not closely watched the native labourer is apt to reduce the pressure on the blade so that his work may be lighter, and this, too, results in poorly stripped abacá. The invention and use of a satisfactory mechanical stripper will, I am told, do more than any other one thing to promote the industry.

In the older abacá districts the holdings are small, but in the new regions, like Davao, there are big plantations, a good many of them owned by Americans, and some in

the hands of corporations. The small producers are generally dependent on a local abacá buyer, who manages to keep them always in his debt.

On a few of the large plantations the harvesters and strippers are paid daily wages, but as a general thing they work on shares. The stripper's pay used to be one third of his output, but latterly it has been one half and even more wherever labour is scarce. He is expected to sell his share of the stripped fibre to the plantation owner, who gives him a little less than the market rate. When hemp prices are high a stripper may average two dollars and a quarter for each day he works. When they are so low that he cannot make a living by working on the abacá plantations, he moves on to a job in the rice and sugar fields. Then the hemp plantations are allowed to lapse into jungle, production goes down until the supply shrinks, prices rise once more, and the workers come back to cutting and stripping.

Davao, like most of the other hemp districts, sends its output to Manila, where the product is sorted and classified before it is shipped to the markets of the world. Up to about ten years ago grading and inspection were in the hands of the export firms, each of which set up its own standards. This finally gave Manila hemp a bad name in the world's markets and the industry began to decline. Then a law was passed providing that abacá must be classified according to colour, tensile strength, and cleanliness. Grading stations were established, to the more important of which government inspectors were assigned. There are to-day more than one hundred of these stations and the buyer can now be sure of the quality of his purchase.

The three principal markets for Manila hemp are the United States, Great Britain, and Japan. Japan takes the finest grades, the beautifully clean, glossy white fibres, which are knotted into hat braids to be re-exported to the United States. We take about fifty per cent. of the export direct from the Islands, mostly the higher cordage grades, while Great Britain takes the lower. Manila hemp fibre used to make up about half the total exports of the Philippines, but with the rise of sugar, copra, and coconut oil it has dropped to second or third place.

CHAPTER XXVI

THE BAGOBOS AND THEIR NEIGHBOURS

AWAY down here in Mindanao, as far south of the north coast of Luzon as the distance between St. Paul and New Orleans, I have come across the Bagobos, the finest-looking people I have yet seen in the Philippines. They are taller and better formed than the Tagalogs or the Visayans, and their faces are more intelligent than those of the Moros. To me they seem more like Persians than Malays. They have bright yellow skins and luxuriant black hair, which they do up in a knot under their turbans. Their foreheads are high and broad, their cheek bones low, their noses straight, their chins round, and their lips thick and protruding. One or two of those I have seen wore beards, but the faces of most of them look as though the hair had been pulled out by the roots. They file their teeth so that they look like a saw, and blacken them by chewing the betel.

There are some ten thousand of the Bagobos, most of whom live along the eastern and southern slopes of Mt. Apo, not far from this thriving town of Davao. Since I have been here I have chatted with some of their leaders through an interpreter, and have gained an insight into their customs and religion by talking with a Filipino school-teacher.

The Bagobos are the most extensively ornamented of all the tribesmen of the Islands. In many cases their

earrings are so large that they hide the whole ear. I have seen some made of ivory which were as big around as a pint cup. They were cut in the shape of an old-fashioned cuff button, with a top disc three or four inches wide and an under one at least an inch in diameter. The under button was slipped through a hole in the lobe of the ear in such a way that it held the outer disc firmly against the side of the head.

In order to get the exact size of one of these earrings I persuaded the Bagobo who sported it to take it off and let me make a tracing of it in my notebook. The larger disc was about the size of a saucer and the bottom was as big around as a silver quarter. The man refused to sell his earring for less than twenty-five pesos. The hole in the lobe of his ear was at least an inch long, and I saw it stretch when he inserted the button. He told me that after piercing his ear he had made the hole larger and larger by inserting sticks and straws from time to time until it was stretched to the desired size. The poorer men among the Bagobos have earrings of wood, while their women wear wooden ear plugs inlaid with silver and brass. These plugs are connected by a beaded band passed under the chin. I noticed one man who in place of an earring wore a large cigar through his earlobe, thus using it as a pocket.

The Bagobo men wear beautifully woven jackets and short trousers of grass cloth dyed red and white and embroidered with beads. Their jackets do not reach to the waist, their sleeves stop at the elbow, while the trousers end at the middle of the thigh. Most of them wear bead bracelets, and nearly all have bands of beads about their legs between the calf and the knee. They carry knapsacks of grass cloth embroidered with beads of many colours

and fringed with tassels. The women load their arms with ornaments of brass and shell, and have rattles and bells attached to their ankles.

Like the Igorots, Ifugaos, and other wild folk of northern Luzon, the Bagobos believe in neither Christ nor Mohammed. Instead, they are nature worshippers, praying now and then to Mt. Apo. They used to make sacrifices at their town of Cimbolan, which is situated some distance from Davao on the slope of the mountain. Fay Cooper Cole, who has made investigations among the Bagobos for the Field Museum at Chicago, describes a human sacrifice made there about eight years before our occupation of the Philippines. Pieces of the dead body were presented to the guests and carried away. He says that on that occasion no part of the corpse was eaten or tasted, but that the Bagobo warriors used sometimes to eat the livers of their braver enemies, thinking thus to gain valour.

The sacrifices made once a year were supposed to appease the spirits troubling the people. My school-teacher friend tells me that slaves were usually the victims. In the ceremony of execution the slave was first stripped and then tied to a limb of a tree so that he was forced to stand upright. His owner always struck the first blow, using a *barong* as sharp as a razor and almost as heavy as a butcher's cleaver. With this he cut the victim across the neck from behind. As the neck was stretched, he was usually able to sever the head from the body at one blow; thereupon the rest of the tribe came up one by one and made a cut in the flesh. By the end of the ceremony the corpse had been chopped to mincemeat and the evil spirits were supposed to be satisfied.

At that time the Bagobos had their professional killers and the man who had killed the most was considered the greatest. As soon as a youth reached his majority he started out to make a reputation, seeking the haunts of a neighbouring tribe where he lay in ambush with his spear or poisoned arrows and awaited his human game. When he killed a man or a woman he cut off an ear or a finger as an evidence of his prowess, and a string of such trophies was the badge of a successful hunter. The members of a certain class of murderers were distinguished by a turban which gave the owner a special license to kill. This was a piece of red cotton the size of a bandana handkerchief with white polka dots scattered over it. When I was here before I saw a Bagobo wearing one and asked him how many men he had killed. His reply was "Twenty."

I understand that human sacrifices are still occasionally made among the Bagobos, but that the people are gradually being brought into less barbaric ways. Villages have been established for them in the region about Davao, and schools started in which, I am told, the teachers have found that there were no less than fourteen languages spoken within forty miles of the town. Some of the Bagobos are raising hemp for export and not long ago they were selling several hundred thousand pounds every month.

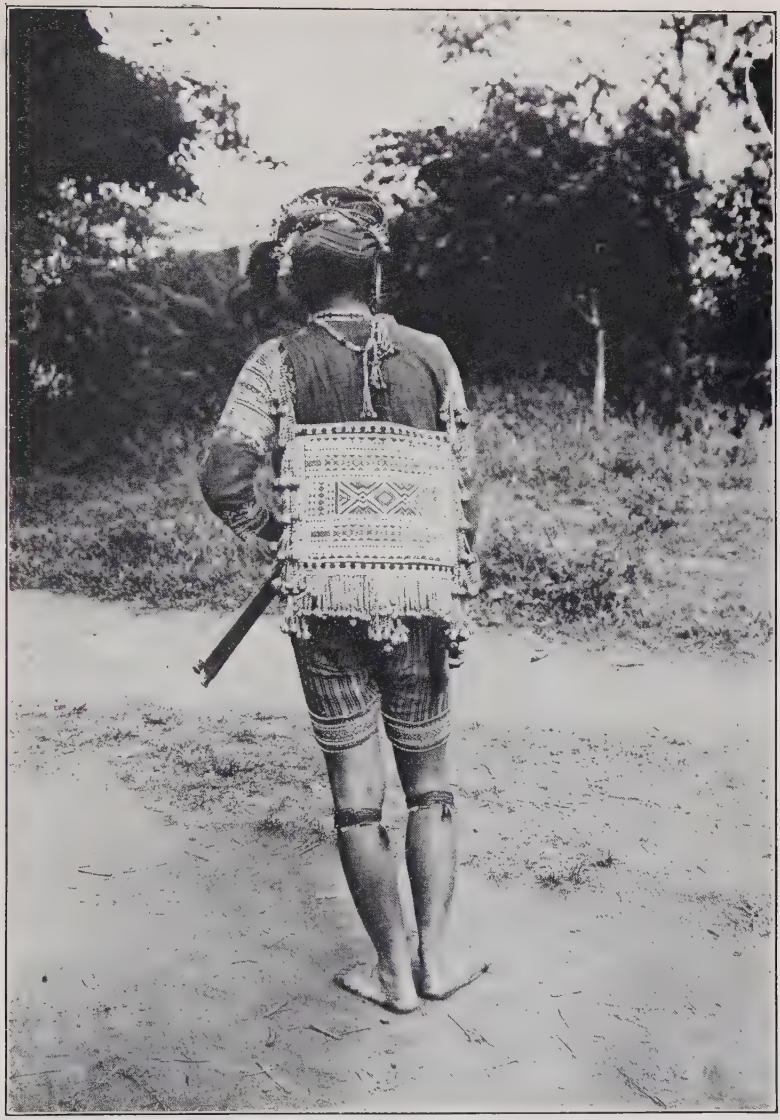
In Mindanao there are also about fifty thousand Bukidnons, some of whom live in trees to be out of reach of their enemies. They are exceedingly timid and even where our officials have been able to get them down into villages and started on little farms, the slightest alarm sends them back to the woods.

The Mandayas, who live at the headwaters of the Agusan River, number about half as many as the Bukidnons.

Tree houses are quite common in their district. The people are divided into many small groups, each of which is governed by a chief called a *bagani*. I do not know how it is now, but not so many years ago a man must have killed at least ten persons with his own hand in order to qualify for this job. When he had killed six he was entitled to wear a distinctive red coat. The principal weapon of the Mandayas is a short dagger of a peculiar pattern. The women's skirts of hemp cloth are of a unique and interesting design. These pagans also make and wear characteristic hats, combs, ear-plugs, and breast ornaments of silver. Slavery is common and polygamy is permitted.

The Manobos, who are the second most powerful pagan tribe of Mindanao, live about the Gulf of Davao and in the lower valley of the Agusan River. When the Americans found them they were dwelling in small groups of thatched shacks scattered through the forest. They had slaves and not infrequently sacrificed human beings. Doctor Worcester says it was by no means uncommon for a man of that tribe to tie a slave to a tree and let his small boys practise lance strokes on the quivering flesh of the victim.

The Manobos have now been gathered into villages along the river banks. Schools have been established and they are improving, but they need to be handled carefully lest they lapse into barbarism. They are an intelligent people, fond of music and dancing, but excessively superstitious. With them nearly every tree has its spirit and the priests, whom the people believe to be possessed of devils, are supposed to be able to talk with the spirits and interpret their wishes. The Manobos are light-skinned and have wavy black hair. They are especially skilled in weaving and metal-working.



The Bagobo men wear beautifully woven jackets of grass cloth dyed red and white and embroidered with beads and carry beaded grass-cloth knapsacks. The women attach rattles and bells to their ankles.

Some of the Manobos still live in tree houses, though most of them have been gathered in villages where schools have been established for them. The Manobos are skilled in weaving and metal working.

In the forested interior of the island of Mindoro are the Mangyans who indicate all numbers above three by tying knots in a strip of rattan. It is said that by using their fingers and toes some of them can count as high as twenty. These people are long haired and sometimes wear turbans. In certain places they go almost naked, though in others the women wear cloth skirts and even jackets besides their gee strings. I have been told that the Mangyans have an alphabet that has come down from their forefathers. They write the letters from left to right on banana leaves or joints of bamboo. They are musical, and sing to the accompaniment of stringed instruments and bamboo flutes. The only weapon in common use among them is the bow and arrow. They send news from village to village by pounding the trunks of trees. In all, there are only some twelve thousand Mangyans.

Children in our Sunday-schools are taught that God is constantly with them, and that He knows their every thought, word, and deed. The Tagbanuas, who live in the mountainous interior of the island of Palawan and number about twenty thousand, believe that they, too, are always under close observation. Their hell is a cave down under the earth, where a giant tends a fire that burns for ever. As each new arrival appears this god demands whether his life has been good or bad, and the answer comes, not from the man himself, but from a louse on his body. Everyone is supposed to have such a louse, who keeps a record for the tender of the fire in hell. If the louse gives a bad report, the giant pitches the soul into the fire; if it is good, the newcomer is allowed to pass on and pick out a wife from among the women who have died before their husbands.

CHAPTER XXVII

THE BUSINESS MAN OF THE PHILIPPINES

ONE of the most remarkable statues in Manila is the figure of a Chinaman. He wears the dress of the wealthy Chinese and his right hand is raised as if he were about to address words of wisdom to his fellow countrymen. This is the monument to Don Carlos Palanca, the founder of a large fortune and long prominent as merchant, financier, and philanthropist. He was worth a thousand dollars for every hair in his queue and when he took a pen in his long-nailed fingers he could sign checks of six figures and more. In the hospital founded by him the Chinese may have free clinical and medical service, and it was he who gave the ground for the Chinese Cemetery in Manila, in which his countrymen may be assured of decent burial if they die on this foreign soil.

While Don Carlos was honoured with a statue largely because of his philanthropies, he also typified the success of his people as the business men of the Philippines. The story of his rise is like that of many another wealthy Chinese in the Islands, for not a few of the fifty Chinese multimillionaires in Manila came in as poor immigrants. Born in Amoy, in China, the son of a merchant, he came at the age of fourteen with his uncle to Manila about seventy years ago. He worked at first as a clerk in a store. He was thrifty. He made money. He saved.

He speculated. As he grew rich he learned that the reputation of the Chinese for integrity was one of the best-paying of commercial commodities and he dealt largely in it. He secured rank and position, was decorated with the Grand Cross of Isabella by the Spanish government, and christened with the Spanish name Don Carlos Palanca. He became captain-general of the Chinese and was the first Chinese consul in Manila. He held the former position for years and was, in fact, the real ruler of the Chinese in the archipelago for half a generation.

When I was first in the Islands I saw Don Carlos in his home, a palace sheathed in galvanized iron which was then one of the few three-story houses in Manila. Passing through a store to the flagstone court about which it was built, I mounted wide mahogany stairs to the gorgeous quarters of Palanca on the second floor. The rooms were floored with the finest of Filipino wood so rubbed and polished that every board shone. The walls were almost hidden by exquisite Chinese embroidery, some of the pieces being as big as bed quilts. I remember that red, the Chinese colour for good luck and happiness, predominated. The furniture, which was of ebony and marble beautifully carved, had cloths of red satin spread over each piece. The chairs were cushioned with red, the table covers were a bright vermilion, and the great mirrors on the walls of each room had scarlet satin hangings about them. Some years later Don Carlos died, and now his name and fame are perpetuated in the monument I have described.

Some of the biggest business houses in the Philippines are in the hands of wealthy Chinese. Take, for example, Lo Sing & Company. The head of this firm came to

Manila from Hongkong knowing not a word of Spanish, no Tagalog, and but little English. He invested his small capital in a partnership in a grocery store. In the space of ten years he bought out his partner, acquired an interest in a small distillery, and finally built two big distilleries valued at a quarter of a million dollars. They manufacture denatured alcohol, besides turning out native beverages made from molasses at the rate of five hundred gallons a day.

Another Chinese millionaire is the owner of large lumber mills in Manila and on the island of Negros and head of the big China Banking Corporation, founded a few years ago with an authorized capital of five million dollars. The corporation serves Chinese merchants in the Philippines and throughout the Orient. Like some other Chinese firms, it employs an American manager. Still another Chinese has built up a huge business in rice, hemp, and other products. His firm owns big rice mills and runs general stores in the great central valley of Luzon.

At Manila is the main office of the company founded by a Celestial, Yap Tico, who came to the Islands sixty or seventy years ago and began his career doing odd jobs in a Chinese store in Iloilo. This firm imports rice and exports sugar, hemp, and copra. It has warehouses and mercantile establishments at Manila, Iloilo, the chief sugar market of the Islands, at Cebu, and all over Occidental Negros; it has branches in Hongkong, Shanghai, Amoy, Ningpo, and Chinkiang. It is the owner of steamships and runs a fleet of inter-island boats. Every year it lends millions of pesos to the sugar growers of Negros and Panay.

To-day there are in the Philippines some forty-five

In the larger towns the Chinese have built separate schools for their children. The number of the latter is not so large as one would expect, for most of the forty-five thousand Chinese in the Islands are male adults.

In Jolo there is a pier given up entirely to Chinese shops. The proprietors take from the Moros their pearls, pearl shells, and other products, in exchange for cloth, canned goods, and similar staples.

Rosario Street in Manila is a bazaar of Chinese stores. Many are large and modern, but others are mere holes in the wall, whose owners make a profit on ice water at half a cent a glass or soap at two cents a cake.

thousand Chinese, about forty-one thousand of them males. Although they number less than one half of one per cent. of the population, yet they do between eighty and eighty-five per cent. of the retail trade and about seventy per cent. of the wholesale business. In Manila alone there are three thousand Chinese firms and seven thousand in the rest of the archipelago. All over the Islands there are Chinese dealing in hemp. In southeastern Mindanao I met them going about among the farmers and buying up the crops. At their stores they trade goods for hemp and purchase it in quantity of the native dealers. Some they send to Manila, and some they export by the shipload from Samar, Leyte, and southeastern Luzon. In similar manner they deal in sugar, rice, tobacco, and copra, handling, in fact, everything in which there is a dollar to be made.

If there is a big warehouse or general store in a Philippine village it is pretty sure to belong to the Chinese. They control the trade of most of the Visayan group, and in Jolo there is a pier lined on each side with Chinese shops. The proprietors take from the Moros their pearls, pearl shell, and other products of the Sulu Archipelago, giving in exchange cloth, canned goods, and other staples. In Luzon you find Chinese stores at every crossroad, and Chinese peddlers go about from house to house showing the women the wares they carry in packs on their backs. The dry-goods man with a load of bright cotton cloths almost as high as himself, piled on his shoulder, is an every-day sight in the capital, notwithstanding the fact that there are whole streets given up to Chinese shops selling the same patterns.

Calle Rosario in Manila is a great bazaar lined with

Chinese stores overflowing with cotton, silks, hardware, and notions. Here there are hundreds of little caves in the wall so full of cotton goods that there is no room in them for counters or cases. The stuffs are piled upon shelves, stacked up on the floors, hung from the ceilings, and even put outside on the street in the arcade running from block to block. The stores have no doors and their front walls are lifted out in the daytime. Some of the shops are not more than six feet wide and ten feet deep, but each has one or two almond-eyed clerks.

The usual costume of the Chinese merchant is an undershirt and tight trousers. His head is uncovered and he often kicks off the heelless slippers he wears on his bare feet. While waiting for customers, he sits in the street outside his store smoking one cigarette after another. No matter how idle he may look, he is far from being asleep, and is always ready to trade. Most of his sales are pitifully small, ranging from ice water at half a cent a glass to soap at two cents a cake, and yet he often accumulates a surprising amount of money on a gross business of fifty cents a day.

The Chinese stores are grouped largely according to the articles sold in them. In Rosario the dry-goods stores take up a number of blocks, and hardware stores have their own section, while in other parts of Manila you find streets given over to Chinese shoemakers, tailors, and sugar manufacturers. Many Chinese make the sweetmeats they sell, and a number of them manufacture chocolate from the cacao bean. Another Chinese industry is the making of little yellow soap disks about as big around as a silver dollar and half an inch thick from coconut oil. One meets the Chinese shoemaker on every corner of the city.

He carries his tools about in a basket and will squat down and mend a customer's soles while he waits. In the markets the Chinese sell most of the fancy vegetables and pork.

In the course of a talk I had with one of the leading Chinese merchants of the Philippines I asked him how the Chinese happened to come to these Islands.

"They came to make money, of course," was his reply. "That is why every one goes away from home. I believe that is why you people came here and why you are staying, although you say you do it for the good of the Filipinos. My people were here before the Spaniards. Our junks came to trade with the savages of these Islands hundreds of years ago. We brought cloths, tea, and rice, exchanging them for gold and other things. In those days trading was done chiefly from the ships, as it was dangerous to come on shore.

"After Manila was founded the Spaniards were anxious to have the Chinese here. We had a settlement in Manila three hundred and twenty-five years ago, and fifty years later there were thirty thousand Chinese in the Islands. After a time the Spaniards, jealous of our business success, tried to expel us. Decrees of banishment were issued and some terrible massacres of the Chinese occurred. But the Spaniards found that they could not get along without us. The Chinese make it possible for white people to live here. They have taught the Filipinos all they know about farming and mechanics, and they are doing the bulk of the skilled work to-day."

"Why cannot the Filipinos take their places?" I asked.

"Because they are inefficient, lazy, and untrustworthy," replied the merchant sweepingly. "The Filipino can't do business. He will cheat you. Take the

British banks here. For years they would not lend to a Filipino on good collateral, but they have always given a respectable Chinese money on his simple I. O. U. There are Chinese in Manila who could borrow a million dollars in that way, but I doubt whether there is a Filipino who could get a loan of ten thousand."

"But why can't our American merchants take over the business of the Philippines and manage it?" said I.

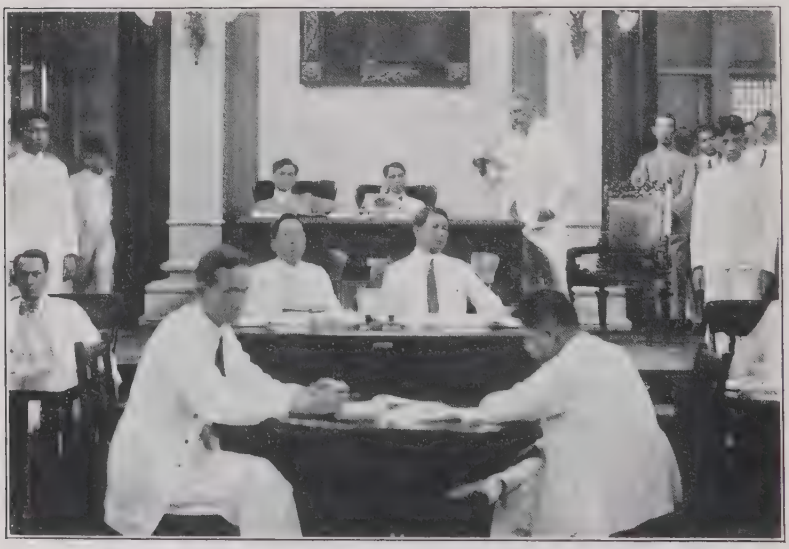
"Because," was the reply, "the Chinese merchant operates on a very small margin. He can undersell and underlive the American and even the Filipino. You people are meat eaters and must have dollars where we can get along with cents. The Chinese merchant whose gross profits are three thousand dollars a year will live upon one thousand. The American will spend the whole three thousand and more. If your people try to compete with us, we are certain to beat you in the end.

"It is easy to see why the Chinese succeed here and the Filipino fails," continued the merchant. "Three Chinese will start a business in a small town with one hundred dollars capital. At the end of a year each will be able to lay away one hundred dollars clear profit. Three Filipinos of the same region may be working for six dollars a week. Each of them will come to the Chinese store on Monday and buy on credit three dollars' worth of goods. At the end of the week each will pay this three dollars and spend his remaining three dollars gambling at a cock fight.

"A Filipino labourer will work for you for two days and leave without notice," continued this severe critic. "You cannot send him where you please nor order him about. He is treacherous to the core, and you can never trust him. He may be a faithful servant for twenty years,

Under free trade between the United States and the Philippines, Manila has become a busy port. Exports from the Islands to us have increased almost tenfold, while we annually sell them about $100,000,000 worth of goods.

In the Executive Building are the offices of the Governor-General. Here he confers with his Council of State, composed of department heads and the presiding officers of the Legislature.



The Governor-General reads his annual message to the Philippine Senate and House sitting in joint session. He has the power to veto any bill of the Legislature either in whole or in part.

and then in a fit of anger rob you without compunction. The element of gratitude is not in him."

Of course this Chinese was unusually harsh in expressing his strong prejudice against the Filipinos. He was also, I think, unfair in some of his statements. For example, Filipinos of all classes are now taking more interest in commercial and industrial ventures than ever before. In many instances their enterprises are successful, while the number of Filipino corporations is constantly growing. Neither is the Filipino labourer so inferior as my Chinese friend makes him out.

And that reminds me of the experience of the New York company that had the two-and-a-half-million-dollar contract for harbour improvements at Manila soon after the American occupation. They tried first to solve the labour problem by bringing in American workers. But the climate was too much for them and they had to go home. Then American Negroes were hired, but they, too, proved unsatisfactory. The Chinese coolies next secured turned out to be even more hopeless than the whites or the Negroes. As a last resort, the company brought in Japanese labourers, and when they failed, was about ready to give up the job. Then somebody suggested trying Filipinos, who at that time were not thought worth their salt. A thousand Filipinos were hired and provided with all the comforts of the best-run of our own industrial villages. They filled the bill. Another American company was wonderfully successful with Filipino labour in building the street railways of Manila. Indeed, I have heard a number of employers say that the Filipino, properly trained and wisely managed, makes a good worker.

There is considerable agitation, especially among the

large plantation owners in the Philippines, for the introduction of Chinese contract labour. I have heard it said that without imported labour it will take the Filipinos ninety years to develop the lands and resources of the Islands. Nevertheless, the natives are opposed to the coming of Asiatics and want to retain the present restrictions on Chinese immigration which are the same as our own. There is a strong anti-Chinese feeling in the Islands. Indeed, there have been so many outbreaks against the Chinese in the past that even to this day whenever there is an unusual uproar in the village street the shutters of the Chinese shopkeeper are the first to go up. Only last week there were serious anti-Chinese riots in the streets of Manila.

What my merchant friend said of Americans taking the place of the Chinese, especially in retail business, is, I think, quite accurate. So far, Americans in the Philippines have gone in for larger enterprises such as big hemp and sugar plantations, lumber mills, and exporting and importing houses, but the question of Philippine independence keeps things so uncertain that American capital has hesitated to invest in the Islands. The restriction on the amount of public land purchasable by an individual or corporation is another drawback of which Americans complain. They say that twenty-five hundred acres is little or nothing for a rubber or coconut plantation, for example. There are only about seven thousand Americans in the archipelago to-day, most of them in Manila.

There are also some seven thousand Japanese in the Islands, though they do not form nearly so influential an element in the population as do our own people. Some of them are in the export and import business and others

have gone into hemp growing in Mindanao. The hot, moist climate of that island does not suit the Japanese, however, and in some instances they have given up and gone home. Furthermore, the law now makes it impossible for them to purchase any of the public lands.

The Spanish still living in the archipelago number in the neighbourhood of four thousand. Some of them are large landholders, while others are engaged in business.

CHAPTER XXVIII

THE QUESTION OF INDEPENDENCE

AFTER travelling far and wide through the Philippines I am again in Manila. I have journeyed by boat, motor car, and railway, on pony-back and on foot. I have visited the pagans of a half-dozen tribes, have hobnobbed with the Moros, from Sultan to fisherman, and have talked with many of the Christian Filipinos. Some of my conversations have been in English and some have been carried on through interpreters, for in these islands one would have to speak in all the tongues of the day of Pentecost and in all those that confused the builders of the Tower of Babel to make himself understood everywhere and on all occasions.

In my writing I have avoided saying much about Philippine independence. I have preferred to tell what I have seen, letting my readers judge of conditions for themselves. I do not give my opinions now, but merely present some of those expressed by men I have met in my travels who seem to me to be qualified to speak with authority on the subject.

The question as to whether Uncle Sam shall keep the Philippines has come up at every step. The answers are diverse. Here is one from a man who spells America with capital letters. He says:

"Yes! Keeping the Philippines is not a question of

Democratic policy or Republican policy. It is a matter of national policy. The United States owns the Islands. It holds them by right of conquest, the right underlying the title to almost every country and colony on earth. They belonged to Spain. We won them by fighting, but, idealists that we are, we were not satisfied to take them on that ground alone, and so we practically made a present of twenty million gold dollars to their former owners.

"This being the case," my positive, belligerent American continues, "we have the Philippines. They belong to the United States just as much as Alaska or Hawaii, as much as California or any part of the Louisiana Purchase, as much as any state of the Union. The Islands are the property of the whole American people, and the Constitution, you know, does not give Congress or a president the right to give away any portion of our territory."

This man may be wrong; yet his words start one thinking. We certainly do own the Islands.

Another phase of the situation has been presented to me by certain army officers. They argue that "preservation is the first law of nature" and that for military and economic reasons we must keep this strategic point. Here is what one of them says:

"Possession of the Philippines is a vital necessity to the defence of the United States. The Pacific promises to be the scene of great conflicts of the future and our western coast faces upon it. In a decade of the present era the nations of the Orient are changing as much as in a thousand years in the past. This is true of little Japan and its sixty-odd millions, while out of the chaos of China will one day emerge a national entity supported by four hundred million people. We are bound to both countries

by the ties of trade, for the protection of which we must have a military and naval base on this side of the Pacific, and right here in the Philippines is where it should be."

Next I give you the pronouncements of a naval officer. He is piously inclined and takes his text from Jeremiah VI, 14: "They have healed also the hurt of my people slightly, saying peace, peace when there is no peace."

"There is no surety of peace in the Far East to-day," he goes on. "Japan has many exposed nerves which our press and Congress are constantly irritating. The State Department keeps spreading the salve of soft words over the hurts, but they are 'healed only slightly' and some day they may break out into angry wounds. The friends upon whose aid we shall have to rely in case of trouble in this part of the world are the British, the French, and the Dutch. Each of these nations has colonies here and all are counting upon us to maintain equilibrium in the Far East by holding the Philippines.

"The Dutch have their great possessions in the East Indies. In Indo-China the French have thousands of square miles next to China, and it is a vital necessity to the British to hold Hongkong, Singapore, and Malaya. If the United States gives up the Philippines, some other western power must take possession of this archipelago. A British admiral recently said at Hongkong that if the United States flag were hauled down at Manila, the British flag would have to go up in its place."

"Remember, too," says the American head of an export firm of Manila, "since 1909 there has been free trade between the United States and the Philippines. In that year, the last in which regular tariff rates applied, the total trade of the Islands with the United States was

valued at only about $15,000,000, while that with other countries was worth, in round numbers, $44,000,000. Last year the total trade of the Philippines with the United States equalled $132,000,000, while that with other countries amounted to only $73,000,000. Except for free trade, the Filipinos would have to pay an average duty of twenty per cent. ad valorem on all imports from the United States. Every year Uncle Sam sells the Islands some $100,000,000 worth of goods upon which no duty has to be paid. Thus the Philippine consumers save twenty millions of dollars annually through having the Islands treated as a territory of the United States.

"Furthermore, the Philippines take from America in a year the crop from 200,000 acres of our wheat fields, the yield of 100,000 acres of our cotton lands, the fruit from 3150 acres of our apple orchards, and more than $1,000,000 worth of the output of our automobile factories. If the Philippines became an independent country, both they and the United States would lose the mutual benefits of free trade. Other countries with cheaper labour would win away from the Islands the market in the United States for their tobacco, sugar, copra, and coconut oil, while American producers would find the Philippine outlet for their goods either closed or much restricted."

My next contributor to the discussion is a college professor, an American ethnologist who has taught the pagans all over the Islands, has studied their ways, and knows the Moros as you know your own brother. He contends that if independence should be granted, the Christian Filipinos are sure to set up a despotic rule over their hereditary enemies, the Moros and the pagans. He says they look down upon the heathen and the Mohammedan

peoples as inferior to themselves and that giving over the Islands to Filipinos will mean the extinction of from one tenth to one twelfth of the total population. He says Uncle Sam has a moral obligation to stand by the Moros and pagans, especially the former, who gave up fighting on our promise of protection and the establishment of justice and order.

I have talked also with some of the pagans, men of the so-called wild tribes. One says that the Americans have no right to leave his people in the hands of their enemies, and others are already objecting to the Christian Filipinos coming to act as their officials and governors. They want American school-teachers rather than Filipinos, and some are even keeping their children from school since the American teachers were discharged.

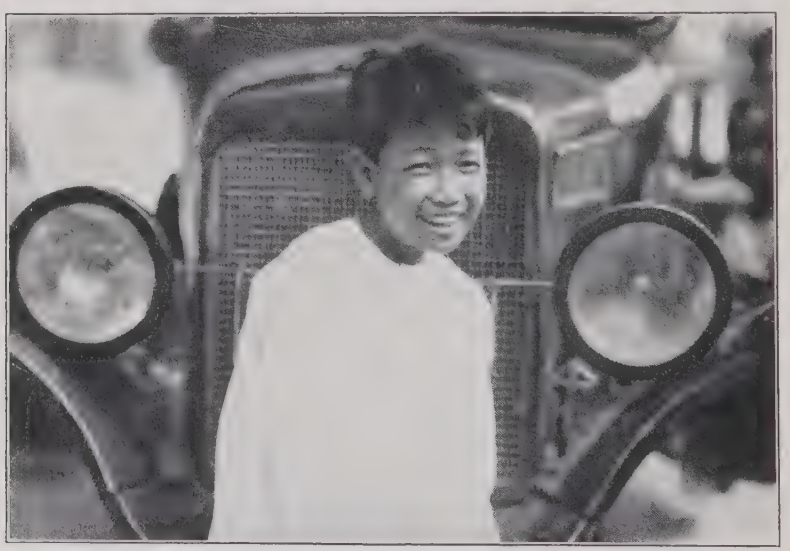
In Mindanao I talked, through an American army officer, with two Moro leaders, tall, upstanding, serious-looking men with bright eyes and strong features. When I asked what they thought of the possibility of the Americans leaving the Islands, one of them replied for both:

"It will mean death to our people. We would cut our throats"—and here he drew his hand significantly across his neck—"rather than endure the rule we know we should have in that case." Then pointing to Old Glory floating in the ocean breeze above the coconut trees, he said, "we acknowledge only one flag, and we love it."

The dattos said they hoped that if independence were granted to any part of the archipelago there might be a division, so that the territory of the Moros would remain in the possession of the United States. I have heard this view expressed by many other prominent Moros, and some of our army officers as well as former American

The Philippine Legislature consists of a Senate and a House, elected by popular vote, and has such extensive law-making powers that the Filipinos are already largely governing themselves.

The Army and Navy Club at Manila is a great gathering place for Americans. There are only about seven thousand of us in the Philippines to-day, most of whom live in the capital.



Perhaps by the time this boy grows up the Philippine question will be a thing of the past, and the Islands will have been handed over to the Filipinos to run as they like.

governors of the Moro territory have suggested this same plan. It is a question that will surely come up whenever the American people decide that the Christian Filipinos are capable of governing themselves.

The Christian Filipinos are opposed to any division of the archipelago. They are a proud, high-spirited people. They want their country to be as strong and great as it can be, and they do not want to give up one foot of it if they can help it. But many of the Americans here, as well as some Filipinos, feel that it is only by some such compromise arrangement that permanent peace between them and the Moros can be secured and the new nation put on a basis that will remove it from the danger of international complications. They say that the Moros have always caused trouble, and that on account of their Mohammedan faith they cannot be assimilated with the Christians. They say, also, that the Filipinos have no more right to the Moro country than has Canada or any other nationality. They believe that, should the United States own the southern islands in perpetuity, we would necessarily feel an obligation to protect the islands to the north. Thus Uncle Sam would still remain the big brother of the Filipinos, and neither Japan nor any other great power would dare to invade Philippine territory. Indeed, some think the relations between the United States and an independent Filipino nation in the north of the archipelago might be somewhat the same as those now maintained with Cuba. This might result in reciprocal tariff agreements which would continue the prosperity produced in these islands under free trade with the United States.

But consider the more than nine millions of Christian

Filipinos themselves. Some serious thinkers say that our responsibility for their welfare is an obligation that we cannot lay down for a long time to come. At present, say they, the Filipinos are but children in political experience. Furthermore, their attitude toward independence is partly the result of what we ourselves have taught them.

I like the spirit that animates the Filipinos. It makes a good foundation for the nation. The same spirit has made Japan almost invincible, for now every Japanese is ready to die for his country. It is in strong contrast with the spirit of China, which is a huge aggregation of families without any real sense of nationality. If the Chinese had one tenth of the national feeling of the Filipinos they could conquer the world within fifty years.

The Filipinos are truly remarkable people. They are idealists and hero-worshippers. Yet the masses have little or no idea of what independence means. If you ask the man on the street to tell you why he wants it, he may perhaps say he will not have to pay taxes when the Americans leave, for then everything will be free. If you ask the Filipinos how they would defend themselves from Japan or any other power if our protection were withdrawn they cannot answer, and if you show them that the cost of building one battleship would be at least fifteen dollars for every family in the Islands, they will shrug their shoulders, point to their leaders, and say they will get along somehow. If you continue the conversation, some will privately tell you that they fear for the future and really hope that the Americans will stay.

I am frequently reminded that the Filipinos have had practically no experience in popular government.

They have always been ruled by bosses and grafters. In their three centuries under the Spaniards the masses were in a state of peonage. The average Filipino then had barely enough to live on, with a peso or so a month to spend in drink and gambling and for weddings and funerals. Even to-day two or three families in each town or village control the community and in many homes there are servants who were brought in as children and who expect to serve their patrons all their lives. The people have so long been dominated by *caciques*, or village bosses, that they consider their subjection a natural condition.

Americans here tell me that the *politicos*, the men who are really running things, are for the most part *mestizos*, that is, Filipinos with Spanish or Chinese blood in their veins. All told, the individuals of superior capacity with a well-developed instinct for exploiting those beneath them number only some ten thousand. Undoubtedly it takes much education and long years of experience to breed in the minds of a people and their rulers the principle enunciated by Calhoun when he said:

> The very essence of a free government consists in considering offices as public trusts, bestowed for the good of the country, and not for the benefit of an individual or a party.

"After all, it is merely a matter of bosses," an American official said to me to-day. "It is a question as to whether we are to have out here a Governor-General appointed by the President of the United States to see that the revenues collected are spent for the development of the Islands and the good of the people, or whether we shall have a ring like Tammany with all government positions held by political henchmen who must work for their bosses in every

possible way. You remember that Quezon said he preferred a government 'run like hell by Filipinos to one run like heaven by strangers.' That is the real attitude of the independence leaders.

"You remember how the Jones Act created the Philippine Senate to supersede the old Philippine Commission, which used to have a majority membership of Americans and wielded considerable power. Now the Legislature is all-Filipino. Each of the twelve senatorial districts may elect two senators who hold office for six years, and the ninety-three members of the House are elected for three years. Except for the American Secretary of Public Instruction, who is also the vice-governor, the heads of the government departments are Filipinos. In fact, since the Jones Act went into effect in 1916 the Filipinos have been running their government pretty much for themselves, and if you ask me I think they have made a mess of it.

"Consider, for example, how they tried to mix politics and the railroad business. The World War sent the prices of tropical products sky high, the island revenues were doubled. There was a surplus in the Treasury, and Quezon and Osmeña, the leaders in the Senate and the House, decided this surplus should be invested. They had the government buy the Manila Railway for $36,000,000 and then straightway discharged the trained officials and employees and put in their own men. They gave a pass to nearly everyone who could control a vote. The total length of the railways taken over about equals the distance from New York to Detroit, but the number of passes issued in a single year was eighty thousand. If free transportation were distributed in the United States in a like propor-

tion to its railway mileage our lines would give away thirty-two million passes a year, and every American between the ages of twenty-five and forty-four would be able to ride for nothing.

"The case of the Philippine National Bank was even worse," continued my informant. "The bank was organized by the government, which invested about $15,000,000 in the capital stock thereof, and practically all the government funds were withdrawn from other banks and deposited in it. Later the institution got control of certain trust funds, amounting to millions, which were on deposit in the United States. Men without experience were chosen as department heads. Within six years the losses amounted to $38,000,000. The bank's entire capital, most of which had been furnished by the government, was wiped out, and in addition the government lost something like $15,000,000 of its deposits.

"This money had been used for all sorts of business ventures authorized by special acts of the Legislature with the government holding the majority of the stocks. Loans were freely made and sugar centrals and coconut-oil mills, backed by men with a political pull, sprang into being. Most of them failed. To make a long story short, the certified accountants who were brought here from the United States to look over the books stated that the bank had been operated in violation of every principle of prudence, intelligence, or even honesty. Some of the officials of the bank were prosecuted and found guilty of embezzlement and other criminal offences."

And what say the Filipino advocates of independence in reply? For one thing, they remind us of our promise in the time of President McKinley to make them self-

governing as soon as they were ready to look after their own affairs. The Jones Act, say they, solemnly pledged us to set the people of the Philippine Islands free as soon as they should prove their capacity for independence by establishing a stable government. This, they declare, the Filipinos have done. They maintain that for a number of years they have been governing themselves and making a good job of it, too.

Of course, they admit, mistakes have been made and politics may have played too big a part. But, after all, they demand, has not the Philippine National Bank scandal its parallels in the United States, and is bossism any more rampant in the Philippines than in the cities of America? How can we learn except by doing things for ourselves? ask the Filipino nationalists. Give us time and experience and we will attend to our own housekeeping. Manuel L. Quezon, the great pleader for Philippine independence, put the Filipino point of view this way:

"We are like, let us say, a young married couple starting out in life. The mother-in-law is helping run their establishment. She may be a perfectly admirable woman, kind, generous, affectionate, wise, and the best cook on earth, but the young household does not want her, ought not to have her, and can never enjoy the happiness that comes of self-support, self-expression, and self-control, until the dear old dame has withdrawn her hand from the affairs of the new home. A block down the street, or across the river, the household thinks of her with profound affection and regard, maintains the friendliest association, and is always her warmest friend and champion, but it does not want her for ever stirring the pot and dominating the bill of fare.

"This is not only natural but inevitable. There never has been a case in history where a normal people were willing to bargain independence and self-expression for benevolence, no matter how kind, liberal, and sincere."

As to all of these matters, however, I make no recommendations. I am not the seventh son of a seventh son. I am neither a prophet nor the son of a prophet. I am not even an editor or a political scientist. I came to the Philippines only as a "looker on in Vienna" and have merely reported what I have found.

CHAPTER XXIX

HAWAII, AT THE CROSSROADS OF THE PACIFIC

TO-DAY I write from Honolulu, where I have come for a look at our island territory. As at Manila, I am still in the tropics, but the chief port of the Philippines is five thousand miles distant, while it is two thousand miles to San Francisco's Golden Gate.

Find the Hawaiian Islands on a map of the globe and you will see why they are so often called the "Crossroads of the Pacific." Taken together, they form a considerable land body in the midst of a vast sea area. Ever since the days of whaling in the southern seas, ships have put in here for water and fuel, and with the development of commerce Hawaii's importance to shipping has greatly increased. The islands command all the chief sea routes to the Orient, and are in the course of vessels sailing from the western edge of our continent to the Philippines, China, Japan, Australia, and the East Indies. The largest steamers afloat can come into Honolulu harbour and from here I can take ship to almost any Pacific port.

Strategically, the islands are of the utmost value to us as an outpost for the defence of our west coast and of the Panama Canal. This is why the United States government has spent millions of dollars on the construction of great military and naval works at Pearl Harbour, about seven miles from Honolulu, as well as at Honolulu and

The Hawaiian Islands, which ages ago were thrown up from the ocean floor in volcanic eruptions, have rugged shores. Between the mountains lie rolling valleys and in many places narrow coastal plains slope off into the sea.

Waikiki Beach, near Honolulu, is one of the world's great playgrounds. Hundreds go out in canoes or with surf boards and ride in on the long rollers that break on a coral reef about three quarters of a mile from shore.

From the height of the Pali, six miles up from Honolulu, one looks down upon hundreds of acres of pineapple fields. Some of them are striped with the paper mulch in which the young plants are set out.

other points on this island of Oahu. These works, together with the immense five-million-dollar dry dock at Pearl Harbour, are making Oahu a great military and naval base, and a Gibraltar in the Pacific.

The territory of Hawaii consists of numerous islands scattered across the sea in about the same latitude as Mexico City. It is nearly fifteen hundred miles from Hawaii, the southeasternmost island, to Ocean Island, lying to the northwest at the other end of the archipelago. Most of the western islands are little more than barren rocks, some of them mere dots on the surface of the sea.

Hawaii, as we know it, is embraced in the eight larger islands at the eastern end of the group. These are situated just about as far from San Francisco as Chicago is east of that city, and farther away from any Australian or Asiatic port than the distance from New York to London. They are not close to one another, some of them being a hundred miles and more distant from Honolulu, with tempestuous seas between. They are visited at regular intervals by small inter-island steamers, but the big liners call only at Honolulu.

The general character of all the islands is the same. They are wildly rugged, each being made up of one or more mountains, seamed with gorges, some of which are more than a thousand feet deep. Between the mountains lie rolling valleys, and at many places at their bases are narrow coastal plains sloping off into the sea. The plains, the valleys, and the lower slopes of the mountainsides contain the only lands suited to cultivation. They are covered with decomposed lava, for the Hawaiian Islands are fire-born. Ages ago they were thrown up from the floor of the ocean in volcanic explosions. Some of them

still have active volcanoes that belch forth flame and gases year after year in sight of the fertile fields built up by the eruptions of the past. Behind Honolulu rises the Punch Bowl, an extinct crater large enough to hold the drink of all the gods of all the nations, while not far below it are vast plantations on which is annually raised enough sugar to sweeten the punch of all humanity.

The land surface of the eight inhabited islands aggregates about sixty-five hundred square miles, or less than the area of the state of New Jersey. The largest island, Hawaii, is about the same size as Connecticut. The population numbers something more than two hundred and fifty thousand people, eighty-five thousand of whom live here in Honolulu, the capital. The only other town of any size is Hilo, on Hawaii, just thirty miles from the volcano of Kilauea, one of the most awesome wonders on the globe.

Think of going by automobile to the shores of a lake of fire and boiling brimstone. That is what one can do on Hawaii. From Hilo a good motor road goes up to a height of four thousand feet on Mt. Kilauea. It passes by sugar-cane and pineapple plantations, and winds through a great forest of tree ferns with fronds making a canopy thirty feet overhead, to the very rim of the crater. This is an enormous pit nearly eight miles in circumference and six hundred feet deep. The floor of this vast bowl of the Titans is a sea of solidified lava, from fissures in which issue jets of steam and sulphurous gases. Almost in the centre is the great red throat of the volcano, the home of Pele, the fire goddess of Hawaiian legend. This throat measures a mile around and it contains a turbulent lake of molten lava. At times the lava rises, dashing against

the shore like the waves of the ocean, while great geysers of flame leap fifty feet into the air.

On the same island is Mauna Loa, which only a few years ago burst forth in a mighty eruption that lasted for a month. The mountain split open, forty fountains of lava shot upward to a height of four hundred feet, and a molten torrent went streaming into the sea forty miles away.

On the neighbouring island of Maui is Haleakala, the mightiest dormant crater in existence. There is room for the city of Chicago on its floor. So terrible is the desolation there that Mark Twain said that gazing upon it made him feel like "the last man, neglected of the Judgment and left pinnacled in mid-heaven, a forgotten relic of a vanished world." And yet here grows one of the rarest flowers on earth, the silver sword, which is as beautiful as the eidelweiss of the Swiss Alps. The volcanoes of Kilauea and Mokauweoweo on Hawaii and this great crater of Haleakala on Maui are now included in the Hawaiian National Park, given by the territory to our federal government. An area of about one hundred and eighty-four square miles was set aside, and is visited by hundreds of tourists every year.

Next door to Maui is the island of Molokai, famous as the scene of Father Damien's labours among the lepers. The colony there to-day is as well managed as that at Culion in the Philippines. The four hundred and fifty patients are comfortably housed and receive every attention and the most careful treatment. Each year there are fewer newcomers to Molokai from the leper-receiving station at Honolulu, for it is here that the most successful experiments in the chaulmoogra-oil treatments are being carried on. Physicians from all over the world, and

especially from Far Eastern countries where leprosy prevails, come to see the work of the scientists at Kalihi Hospital at Honolulu.

Northwest of Oahu lies Kauai, called by the natives the "Garden Isle." It is the oldest island of the group, just as Hawaii is the youngest, or latest to come up from the ocean floor and join the archipelago. It is about the same size as Oahu, though by no means so well populated. In the lowlands fringing its central mountain core are many sugar plantations. Its steep hillsides have been scored by the heavy rainfalls into gulches, which are filled with luxuriant growths, including some plants found nowhere else in the world. Here also is Waimea Canyon, a miniature Grand Canyon, which, while not so deep as the gorge of the Colorado River, is even more wonderfully coloured.

Toward the western tip of the archipelago lies the tiny island of Laysan, which is set aside as a sanctuary for birds. To this spot, three thousand miles from the mainland, millions of albatross, plover, tern, and man-of-war birds come every year to breed and rear their young. Some years ago the manager of a colony of labourers then stationed on the island kept a record of one male bird which was readily identifiable because he had lost a leg in an accident. For five successive autumns this bird returned on almost the same date to Laysan, wintered there with his fellows, and departed in the spring.

The Hawaiian Islands, which by the request of the people themselves were annexed to the United States in August, 1898, became a territory two years later. The Governor and the Secretary are appointed by the President for four-year terms, but the Senate of fifteen members and the House of thirty representatives are elected.

They meet in Iolani Palace, where Queen Liliuokalani, last of the native rulers, once held court.

The story of how the American flag came to fly over the islands begins back in 1819, when seven missionaries and their wives sailed from New England to carry Christianity to the natives of the Sandwich Islands in whom they had become interested through the tales of American whalers. They knew little or nothing of the lands they sought beyond the fact that Captain Cook had discovered them in 1778, naming them for his patron, the Earl of Sandwich. He died there in a fight with hostile natives. Soon afterward a Hawaiian chieftain, Kamehameha I, succeeded in making himself ruler over all the islands. When the missionaries arrived bringing a new gospel, his son and successor had just abolished the superstitious belief in taboos that had bound his people. The newcomers were cordially greeted by King Kamehameha II and his five wives.

One of the first converts to Christianity was Kapiolani, a six-foot native princess with a mind of her own. As soon as she was converted she determined to give her people an object lesson. Journeying to Kilauea, a hundred miles distant, she gathered there some of the *ohelo* berries growing on the edge of the crater and always held sacred to the goddess Pele. Then, while her horror-stricken followers looked on, she threw them into the fire pit, at the same time defying Pele to harm her. There was a fearful silence, for the natives expected the goddess instantly to avenge the insult. But no calamity came down upon Kapiolani, who turned to her people and told them about her new faith. After this a third of the natives became Christians.

Five years after the missionaries landed the Ten Commandments were adopted as the basis of the laws of Hawaii. The devout New Englanders reduced the Hawaiian language to writing and translated the Bible into the native tongue. By the middle of the nineteenth century the whole people had learned to read and write. When we annexed the islands they had a school system like that of New England and it was the boast of the inhabitants that they were the most literate people on earth.

The missionaries had their troubles in the midst of all they accomplished. In 1848 an epidemic of measles broke out which killed off about a tenth of the population, and during the last half of the century there was a constant fight against the vices brought in by dissolute men of the sea who found this "Paradise of the Pacific" much to their taste. The native race began to die out, the reigning house lost most of its prestige, and, more and more, affairs of state were managed by the descendants of the first missionaries and those who followed them. One of these men, Sanford B. Dole, became president of the republic that was proclaimed in 1894 after the overthrow of Queen Liliuokalani. Four years later the United States granted Hawaii's request for annexation.

The union has proved a good thing for all concerned. It has given us possession of a vital point in the Pacific and provided a great base for our army and navy. Moreover, besides supporting its own government, every year the territory pays into the Federal Treasury in customs duties, income taxes, and other internal revenue between fifteen and twenty millions of dollars. The annual income from the islands more than balances the huge sums

spent in fortifying them and providing facilities for the use of our fleet.

Honolulu fairly reflects the present condition of the territory. I have never before been in a capital of its size that showed so many evidences of prosperity and of easy, pleasant living. The beauty of the place contradicts my impression of it as I came toward the harbour. When we first sighted Oahu I thought the land was as bare as the Death Valley of California. Ragged craters of volcanoes long since burnt out and seamed with deep gorges cut the sky with their sharp gray outlines and the general effect was one of desolation. As my ship drew nearer, however, I saw other hills covered with an emerald fuzz, and as we rounded Diamond Head, I caught sight of low mountains clad in green. When we came to anchor, palm trees with quivering branches waved me a welcome and I saw the homes of Honolulu peeping out of a luxuriance of tropical vegetation. Since I have been ashore I find the city a regular botanical garden and well-deserving of its fame as one of the most beautiful spots in all the earth.

The streets are lined with business houses and the stores are as fine as those of a city of four times its size in the United States. Everything has an American air. The names over the principal shops are more strictly American than those in many of our own cities, and the faces of the people you see on the streets are chiefly of the American type.

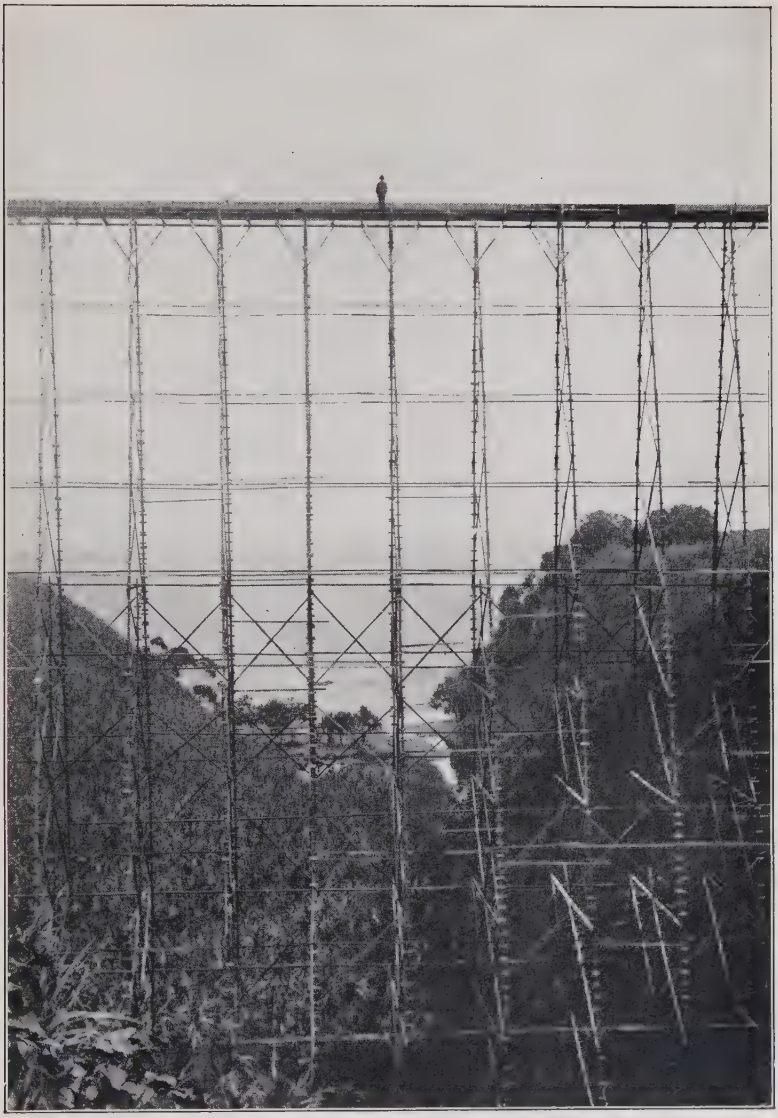
New business structures are being built and I see but few "for rent" signs. The daily papers publish press dispatches from all over the world and carry the quotations of the New York stock markets. In the big depart-

ment stores and in the hotel lobbies the latest fashions of New York, London, and Paris are displayed. There are fine public schools and here we have the youngest university under the American flag.

Everywhere there seems to me to be a holiday air. There is much talk of sports, especially of the bathing at Waikiki Beach, where residents and visitors go for surf-boarding, the ancient pastime of Hawaiian royalty. It is a wonderful sight to see a slim native youth standing on his board and riding in on the long rollers that break on the coral reef about three quarters of a mile from shore. Most of the tourists get their thrills from riding the surf in outrigger canoes. Altogether, Honolulu is so rich and so lively that it makes me think of a cross between a mining town on a boom and a fashionable seaside resort.

This is one of the most cosmopolitan cities in the world. This morning I had a good chance to see something of the crowd when I went into the post office. There were whites of almost every nation of Europe, mahogany browns from the neighbouring Pacific islands, sallow-faced Portuguese, and yellows of all shades from China, Japan, and the Philippines. Among the whites the Americans predominated, and all were apparently of the better classes and well-to-do. Good-looking men they were, and most of them young. Nearly everyone seemed to speak English, though the signs over the post-office windows were in five languages—Hawaiian, Chinese, Japanese, Portuguese, and English.

The Hawaiians now form only a small proportion of the population of the islands owned by their forefathers. Captain Cook estimated that there were four hundred thousand people here when he came, and while his figure is undoubtedly too high, it indicates that the islands were then



On Hawaii Island, sugar cane grown on upland fields is floated down to the mills at sea level by means of flumes. Sometimes the flumes are carried across deep valleys on high wooden trestles.

Many of the Hawaiian pineapple growers set their plants in holes punched in heavy paper, which keeps down weeds, conserves moisture, and otherwise protects the soil about the young "pines" until they have a good start.

densely populated. In 1832 a census showed a population of one hundred and thirty thousand, about all of them Hawaiians. Twenty years later the total population had dwindled to seventy-one thousand, of whom twenty-one hundred were foreigners.

As the sugar plantations developed there was need for more labour than could be furnished by the disappearing native race and so many workers were brought in that finally the outsiders exceeded the Hawaiians. According to the latest census about forty per cent. of the population are Japanese, while less than one tenth are full-blooded Hawaiians. There are, besides: 27,000 Portuguese, 23,000 Chinese, 21,000 Filipinos, 5000 Porto Ricans, as well as Spaniards, Koreans, Russians, and Negroes, to say nothing of numbers of mixed bloods.

Down here the whites do not seem to feel the usual prejudice against peoples of darker hue and there has been much intermarriage between natives and Caucasians. I have before me a photograph of a group of thirty-one girls attending the same school in Honolulu. Each one represents a different race or racial combination. The list starts with a pure-blooded Hawaiian and the labels grow more and more complicated until for Number 27, a nice-looking young girl of sixteen, I notice the legend "Hawaiian-Chinese-German-Norwegian-Irish." I understand that the heredity experts find Hawaii's mingled strains of people a scientific treat.

The decline of the Hawaiian race has given considerable concern to the leaders among them. One of these was the late Prince Jonah Kalanianaole, who for years sat in our House of Representatives as the delegate from Hawaii. In Washington he was known as "Prince Cupid" and

was extremely popular. I have often seen him there. He was convinced that the only way to keep his people from dying out was to put them back on the lands that their ancestors had tilled. It was largely through his efforts that Congress passed a law for the rehabilitation of the Hawaiians and part-Hawaiians. Tracts of land have been set aside for them on the island of Molokai and a demonstration farm has been established there. The project has two aims: First, to build up in Hawaii a class of independent farmers; and, second, to get the Hawaiian and part-Hawaiian people on land of their own. If this scheme, now in its infancy, proves successful, its scope will be extended. It may be that a hundred years from now our grandchildren will see the Hawaiians thriving here in their earthly paradise as they did in the days before the white men came.

CHAPTER XXX

OUR SUGAR AND PINEAPPLE ISLANDS

THIS afternoon I drove up to the Pali, the scenic wonder of Oahu. Leaving Honolulu, my car climbed steadily for six or seven miles up a winding road of lava and coral lined with luxuriant vegetation. The way lay through the Nuuanu Valley, which is dotted with the homes of wealthy planters set in the midst of grounds that are veritable fairylands of tropical foliage. Indeed, I know of no place in all the world where wealth can command so much beauty and ease of living as here in these islands. We saw the golfers out on the links of the Oahu Country Club, and drove by the mausoleum where lie the royal dead of Hawaii. The great chieftain Kamehameha I, however, is not buried here, for after the ceremonies that made him a god, his body was hidden in a cave, the location of which has never been revealed.

In a short while my car stopped, I got out, walked a little way, and came suddenly upon a sheer precipice that seemed like the jumping-off place of creation. The sight of the tremendous drop took my breath away. So, too, did the terrific wind that struck me fairly amidships and almost toppled me over. In the space of a few steps I had come out on the windward side of Oahu and into the full force of the northeast trades that blow over the islands for ten months of the year.

But I soon forgot the wind in gazing upon the magnificent panorama spread out below me. The story is that when Kamehameha I conquered the king of Oahu, he drove three thousand of his enemies up the incline and over the edge of the precipice. As I looked down upon it to-day the plain below did not suggest any such tragedy of tribal warfare. Stretching away to the white fringe of the incoming breakers of the Pacific were sugar cane fields of deep green and pineapple plantations striped in rows of greenish gray. Here and there little round volcanic hills, clad in grass and trees, thrust up their heads. Off in the distance a big sugar mill sent its smoke across the sky. At one side the towers of a wireless station reminded me that, after all, I was still in the world of radio concerts and the news of the day.

As I looked down on all those acres of cane and pineapples I thought to myself that here I had in brief the story of the prosperity that impresses me in Honolulu and of the wealth that made possible the splendid homes I had passed on the way up. For in Hawaii not only the big money but the comfortable incomes as well are made in sugar or in pineapples or in some industry closely connected with one or the other.

Captain Cook found here sugar cane "of large size and good quality." According to the old Hawaiians it grew wild and luxuriantly in the lowland valleys and once upon a time the pagan natives used it as an offering to their gods, especially to Mano, the Shark. It is said that some sugar was manufactured in the islands the year before the missionaries came, but the first attempt at cane cultivation on a large scale was not made until fifteen years later when Ladd & Company, Honolulu merchants, broke

ground for a big plantation. They used natives to draw their ploughs.

Not long afterward the first centrifugal machine was invented by Weston, then manager of what is now the big Honolulu Iron Works, which manufactures sugar machinery, not only for Hawaii but for Cuba, Formosa, and the Philippines as well. When the Civil War came, cutting off the northern United States from the cane fields of the South, the Hawaiian producers got a real start. In 1837 the islands exported two tons of sugar; in 1866 they shipped nearly nine thousand tons, while to-day the annual export averages between five and six hundred thousand tons. At a conservative estimate, two hundred million dollars is invested in the sugar interests, while nearly one fifth of the entire population is on the payrolls of the sugar corporations. Many additional workers are required in the machine shops, banks, stores, and supply houses, and on the wharves, vessels, and railroads maintained largely on account of the industry.

Nowhere else in the world has sugar culture been more thoroughly studied or brought to a higher state of perfection than in Hawaii. Fertile Java alone equals this territory's average of five tons of sugar to the acre; Cuba has not half so large a yield. The planters have had to overcome many handicaps to obtain their big production. Cane is grown only on the islands of Hawaii, Oahu, Maui, and Kauai, the mountainous character of which causes one difficulty of the Hawaiian sugar grower. A young expert connected with one of the large plantations of Oahu explained this to me as we sat talking in my hotel last night. Said he:

"From the four sugar islands here in the track of the

northeast trades the mountains reach up and rob the winds of their moisture. In places on their windward sides there is a tremendous rainfall. At least half-a-dozen points receive more than 350 inches a year. Mount Waialeale, on Kauai, which has an elevation of 5080 feet, deserves its name of 'Uncle Sam's dampest corner.' It has an average of 476 inches of rain annually. In fact, that is the wettest place in the world, for Cherrapunji, India, which has long claimed that it had the heaviest rainfall on earth, averages only 458 inches, though I believe as much as nine hundred inches has been known to come down there in a year. Yet even on the windward coasts of Oahu and Kauai the rainfall in most places rarely exceeds 80 inches and in some is as low as from 45 to 50 inches. On the leeward coasts of all four islands the precipitation is deficient, the amount varying from 15 to 40 inches near sea level."

"How much rain does sugar require here?" I asked.

"About eighty inches," was the reply. "Much of our arable land, in fact more than half that suitable for cane growing, has to be irrigated. We have in these islands some of the most remarkable irrigation projects on the globe. Ewa Plantation, eighteen miles from Honolulu, depends on sixty artesian wells, from which more than eighty million gallons of water can be pumped in twenty-four hours. Another big property on Oahu has an aqueduct nearly fifteen miles long, ten miles of which is tunnel. In this way it gets from the windward side of the mountains more than thirty million gallons of water a day. One estate uses as much water every twenty-four hours to keep its cane growing as the city of San Francisco consumes daily."

"Such works must be expensive," I remarked.

"Expensive! You bet they are!" exclaimed the young man. "About seventeen million dollars has been spent in getting water on the sugar lands of Hawaii. The average cost of irrigation is somewhere around a dollar and a half per ton of cane, or in the neighbourhood of twelve or thirteen dollars per ton of sugar. On some plantations it runs as high as two dollars and eighteen cents."

"But does it pay?" I inquired.

"Yes, indeed," was the reply, "because the yields are so much better from watered land. For instance, Maui Island, where practically all the sugar land has to be irrigated, produces about fifteen thousand pounds to the acre, compared with eight thousand pounds for Hawaii Island, which has, for the most part, an adequate rainfall and therefore needs but little irrigation.

"All kinds of intensive methods have been necessary down here," continued my informant. "Do you realize that only about ten per cent. of the total surface of the islands, or an area about half that of Rhode Island, is considered arable or reclaimable? And of this six hundred and fifty square miles but three hundred and fifty are used for sugar cane. Moreover, a crop is not ready for harvest until from eighteen to twenty-one months after planting, so each acre produces only about twice in three years. Every inch of land must be made to yield the utmost. The fertilizer bills paid by our sugar growers would make the eyes of the average farmer of the United States just about pop out of his head. Ewa Plantation, for instance, spends around two hundred and fifty thousand dollars a year for fertilizer, but its bumper crops easily carry the expense.

"Ewa, by the way, claims that it holds the record yield. Just last month it harvested from a field of several hundred acres a crop averaging fifteen and a third tons of sugar to the acre. With raw sugar at eighty dollars a ton, which is about the average of the last ten years, that means a gross return of more than twelve hundred dollars on an acre of land."

"That stock must pay pretty big dividends," I remarked.

"Well, the story of the profits on Ewa is a good one," answered the young man with a laugh. "The plantation, as you know, faces on Pearl Harbour and is on the lee side of Oahu. When J. B. Atherton, a member of one of the old missionary families, started in to grow cane there it was as arid a piece of land as you ever saw. It was so dry trees wouldn't grow on it and it wasn't even good pasture land for cattle. Atherton lost money steadily. He used to tell how he sometimes stayed away from his office so as not to have to face the creditors he couldn't possibly satisfy. The concern was about bankrupt when it was discovered that an abundant supply of water lay beneath the surface. Artesian wells solved the problem.

"The people who had hung on to their stock were lucky. The original investors had capitalized the venture at half a million dollars and later assessed themselves for another half million. By 1896 the stock was earning five per cent. a month on a million dollars. The company grew more and more prosperous and issued stock dividends until finally, without any more cash being put in, the capitalization was five million on which eighteen per cent. dividends were paid and the original stockholders were getting ninety per cent. a year on their investment. To-day

Ewa dividends average around twenty per cent., and only once in the last ten years has the stock yielded as little as eight per cent. In 1920, a big year for the sugar companies, it paid thirty per cent."

Hawaii's cane-growing industry is a case of intensive farming on extensive areas; for the sugar estates are large-scale operations. The Hawaiian Commercial & Sugar Company's plantation on Maui, for example, consists of thirty-five thousand acres, twenty thousand of which are in cane. Thirty-five thousand cattle feed on the hillsides of this huge farm. Its three thousand workers are housed in twenty-four villages and camps. Another plantation not far from Honolulu has thirty miles of permanent railway tracks from fields to mill, besides nearly ten miles of portable track. Its employees with their homes make up a good-sized town. There are tennis courts and a baseball field, as well as a social hall for billiards, pool, reading, and entertainments. The company supports a free kindergarten and maintains a fully equipped up-to-date hospital of forty-four beds in charge of a resident physician. Medical attendance and nursing are furnished free.

The sugar business of Hawaii requires heavy investment, and so it has become a highly organized industry. It is in the hands of some forty-seven corporations, which are organized into the Hawaiian Sugar Planters' Association. So powerful is this body in all the affairs of the islands that it has been called the "Hawaiian House of Lords." The planters' association supports at Honolulu one of the finest agricultural exper ment stations in the world.

"Just let me tell you some of the things this station has done," said a man long connected with its work. "Take

the matter of parasites, for instance. You know, as a rule, wherever there is a parasite Nature balances things by providing an enemy to prey upon it. Well, in Hawaii we have sometimes had the bad luck to get the parasite without the enemy. That was the case with the leafhopper, a kind of plant louse, which invaded our cane fields. The little devil punctured the cane to lay its eggs, and when the young were hatched they fed on the plants. Millions of dollars were lost. One company's production fell from twenty thousand to eight thousand tons.

"Finally, two experts of the experiment station started out on a pilgrimage of months to find the bug that would do for the pest. In the Library of the British Museum in London they found a description of the leafhopper in its native haunts, the cane fields of Queensland, Australia; so to Queensland they went and spent weeks hunting enemies of the little plant louse. At last they found about the tiniest insect you can imagine, a creature so small that it lays its eggs in the eggs of the hopper. The young hatch out sooner than those of the pest and come to life in time to eat the embryo hoppers. Then, having gained their strength, they start off in search of other hoppers' eggs in which to lay their own. Since this insect was introduced into Hawaii it has held the leafhopper in check.

"Almost as bad as the hopper was the borer. He cut in near the base of the stalk, then ate his way up through the heart until the cane dropped over and died. My friend, Frederick Muir, carried his search for the beetle's enemy to China, the Federated Malay States, Java, Borneo, the Moluccas, Amboina, Ceram, and New Guinea.

"He spent not only months, but years in swamps and

jungles. He nearly died of fever and often his life was in danger, but he kept up his bug hunt. At one time he was staying with an Englishman in some God-forgotten hole. He had somehow or other picked up a cat and made a great pet of it. In the morning he'd generally wake to find the cat curled up on his chest and would throw it off. One morning his pet hit the floor with an unusual sound and he leaned out of bed to see an enormous snake lying there—with the cat inside.

"But to go back to my story. Muir found in Amboina a fly that lays its eggs in the borer. He shipped specimens back to Hawaii, and even brought them himself, but they didn't live through the voyage. Finally he discovered some of the flies nearer home, in New Guinea. Once more he started off with a colony of his prizes, but was taken ill, and the specimens he sent on died on the way.

"When he was well again, back Muir went to New Guinea, got his flies, and had proceeded as far as Fiji before he keeled over with malaria. But by this time he had established two halfway breeding stations, one in Australia and the other in Fiji, and as soon as he was up again he turned toward Hawaii. He reached Honolulu with his cageful of living flies more than four years after he had started on his quest.

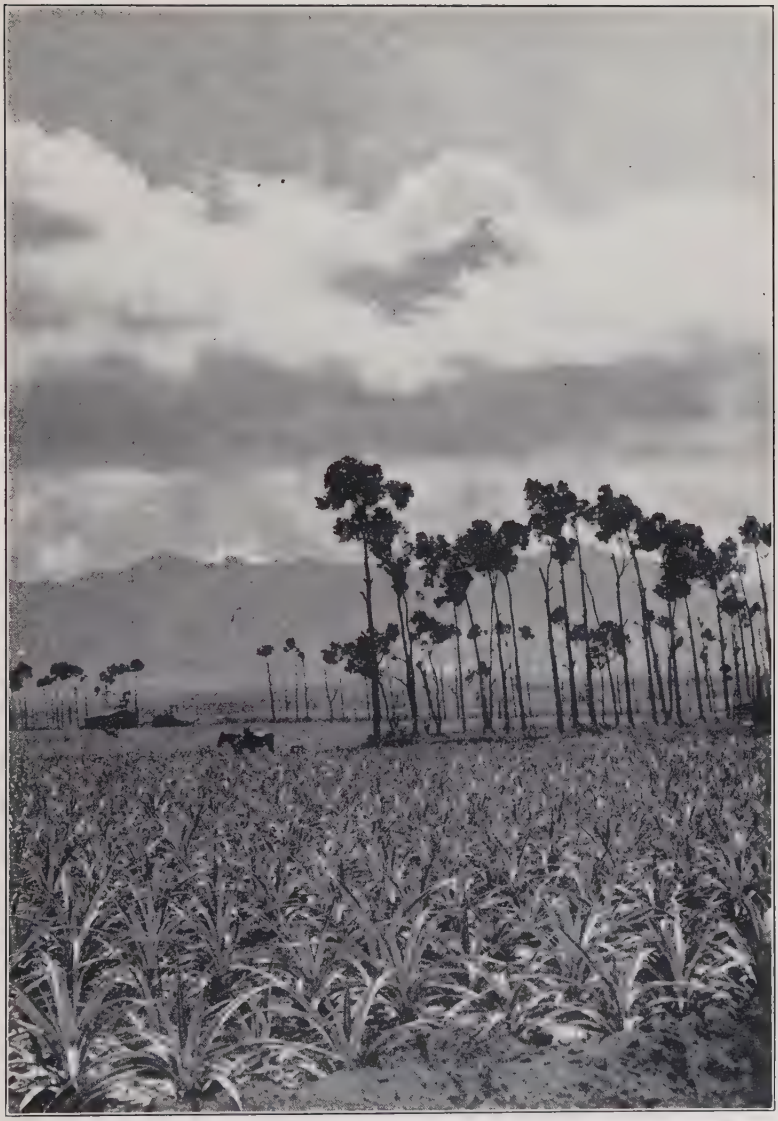
"The fact is," concluded this gentlemen, "I don't believe money was ever paid out to better advantage than that spent in maintaining the experiment station. It costs the association around two hundred thousand dollars a year, but the planters have certainly more than got their money back, not only through such spectacular feats as those I have described, but through the breeding of new cane varieties with higher sugar content, through soil

analysis, through the study of irrigation problems, and in numerous other ways."

For years King Cane ruled alone in Hawaii. In the past quarter of a century Prince Pineapple has been steadily growing, and will, it seems likely, one day be the peer if not the superior of the old sovereign. In 1903, when sugar worth $25,310,000 was exported from Hawaii and represented about ninety-four per cent. of the value of all exports, there was a shipment of $7500 worth of pineapples. Last year the sugar sent out was valued at $70,000,000, while the pineapple crop brought just under $30,000,000. Close to 6,000,000 cases of the canned fruit were exported. It is predicted that within ten years pineapples will surpass the sugar crop in value.

The first pineapples grown in Hawaii came from plants imported from the East Indies. They yielded abundantly, so abundantly, in fact, that the local markets were glutted. As ripe pineapples do not ship well over long distances, and those gathered green do not develop enough sugar in ripening, the growers thought it best to pull up the plants and throw them away. But a few homesteaders rescued some of the uprooted "pines," which they transplanted into their own gardens. In time they set up a cannery to take care of the surplus fruit and from this small beginning has developed the second largest industry of Hawaii.

Now the business is booming. Just recently one of the big pineapple companies, which already had a ten-thousand-acre plantation on Oahu, paid a million dollars for the small island of Lanai, formerly used by another big corporation as a cattle ranch. The company plans ultimately to have fifteen thousand acres of the island planted to



The principal pineapple area of Hawaii is on the central plateau of the island of Oahu, where the annual rainfall of forty-nine inches is adequate for this fruit, though not for sugar cane.

The great red throat of Mt. Kilauea is a lake of molten lava a mile in circumference, which now and then dashes in waves against the sides and sends clouds of gases hundreds of feet into the air.

pineapples. An American packing firm has leased five thousand acres on the island of Molakai for pineapple culture. Another company has bought up a big sugar property with the idea of substituting pineapples for sugar and expects to have an annual output of half a million cases, or twelve million cans.

Pineapple culture in Hawaii does not take so much money or require so much effort as does sugar growing. Furthermore, the two industries dovetail in some important respects. For one thing, the pineapple belt lies above the best cane lands, at an altitude of from five hundred to twelve hundred feet above sea level. The principal pineapple area is on the central plateau of Oahu where the annual rainfall of forty-nine inches is adequate for the fruit. Lands formerly thought valueless except for grazing are now being turned into pineapple farms.

Moreover, the pineapple harvest, when the maximum number of workers is needed, comes in August and September, at about the time when the cane grinding is over and the mill hands are being released. Again, the pineapple pack supplies cargo for ships from September 15 to December 15, when practically no sugar is moving overseas.

Walking through the business section of Honolulu one passes the biggest pineapple cannery in the islands. Delicious odours float out from it. Long trains of cars loaded with "pines" come in to the plant every few minutes. The fruit passes swiftly through the processes that change it into cans of sliced or grated pineapple that will soon appear in salads and desserts on our American tables. Practically the entire pack goes to the United States. From the moment it leaves the train the "pine"

is not touched by the bare hand. Machines peel off the skin, take out the core, and slice the fruit. The cores are chopped by machinery into bits for the use of confectioners, while any meat sticking to the tough skins is grated and canned. From the stray shreds is made the syrup used in canning. What is left of the skins is taken back to the fields for fertilizer. In some plants the waste is crushed, allowed to ferment, and then distilled, with a recovery of ninety-four per cent. pure alcohol. One of the big American packing companies uses the alcohol so obtained for motor fuel in its automobiles and for making vinegar.

Both the pineapple and sugar industries are the result of American enterprise. Of the two hundred and fifty thousand people on the islands only thirty-six thousand are listed as "Americans, British, Germans, and Russians" —yet our people are the dominant element here. Many of them are descendents of the missionaries that came out a century ago. Their forefathers acquired the large holdings of land on which most of the big fortunes of today are based.

To give you an instance of what happened, Dr. Bond, one of the missionaries, received a legacy of four thousand dollars with which he purchased a large tract of land from some Hawaiian nobles. A few years later he sold it to a sugar corporation, taking stock in payment. By the time Dr. Bond died he had received three hundred thousand dollars in dividends. He had paid back to the American Board of Missions every cent that he had drawn as salary, had given the Board many thousands besides, and had made liberal contributions as well for the education of the Hawaiians. Yet he left an estate

worth three hundred thousand dollars, or seventy-five times what he had originally invested.

The benevolent spirit of their ancestors is apparent in many of the big business men and planters in Hawaii. Nowhere have I found workers better housed and looked after than on the large estates here. I should say that these men had given a good account of their stewardship in the distant Sandwich Islands to which their forebears came more than a hundred years ago.

THE END

SEE THE WORLD

WITH

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160°
158°
156°
22°
20°
KAUAI
NIIHAU
Kaulakahi Channel
Kaiwi Channel
Kalaupapa
MOLOKAI
Pailolo Channel
DAHU
Honolulu
LANAI
MAUI
Haleakala (Vol.)
KAHOOLAWE
Alenuihaha Channel
P A C I F I C
O C E A
Mauna Kea (Vol.)
HAWAII
Mauna Loa (Vol.)
Kilauea Crate (Vol.)
HAWAIIAN ISLANDS
Scale of Miles
0 20 40 60
140°
180°
140°
100°
ALASKA
SIBERIA
CANADA
Seattle
2409
40°
San Francisco
UNITED STATES
2091
CHINA
JAPAN
Yokohama
Shanghai
3394
4330
Midway Is.
Laysan I.
HAWAII
Manila
PHILIPPINE ISLANDS
4797
Guam
Yap
2270
4693
P A C I F I C O C E A N
Panama
0°
5919
Samoa
2917
AUSTRALIA
Sydney
Valparaiso
40°
NEW ZEALAND
GENERAL DRAFTING CO., INC., N.Y.

HILIPPINE
ISLANDS
Scale of Miles
50
100
150
118°
126°
20°
16°
12°
8°
122°
BATAN IS.
BATANES PROV
Balintang Channel
Aparri
ILOCOS NORTE
ILOCOS SUR
ABRA
MOUNTAIN
Cagayan Valley
ISABELA
Lingayen Gulf
LA UNION
Kiangan
NEUVA
Baguio
Antamok
Dagupan
VISCAYA
PANGASINAN
Caraballo Mts.
NEUVA ECIJA
Zambales Mts.
TARLAC
ZAMBALES
PAMPANGA
Macabebe
Baliwag
Manila
BATAAN
RIZAL
Laguna de Bay
Manila Bay
LAGUNA
BATANGAS
LUZON
PACIFIC
OCEAN
SOUTH
CHINA
SEA
CAMARINES NORTE
CAMARINES SUR
Mt. Mayon
SORSOGON
MINDORO
Romblon I.
MASBATE I.
SAMAR
Cullon I.
PANAY
LEYTE
Iloilo
NEGROS
OCC NEGROS
OR NEGROS
Cebu
Mactan I.
BOHOL
Dumaguete
PALAWAN
SULU
SEA
SURIGAO
AGUSAN
MISAMIS
BUKIDNON
MINDANAO
LANAO
L. Lanao
DAVAO
ZAMBOANGA
Davao
Mt. Apo
COTABATO
Davao Gulf
Isabela
Zamboanga
BASILAN I.
Jolo
Maibun
JOLO I.
ORNEO
CELEBES SEA